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ABSTRACT

The two major goals of the conference were to identify, prioritize, and address critical problem areas and needs in trade and industrial (T & I) education with major emphasis upon implications for personnel development, and to encourage participants to develop at least a rudimentary communications network. Participants gathered preconference data within their own states to determine issues with implications for changes in preservice and inservice preparation of T & I professionals. Educators involved in the preconference data collection set up a communications network nationally within each U.S.O.E. region and within each participating state, designed to aid in implementing needed changes in their state's professional development activities. Fifteen critical T & I issues were discussed in plenary and workshop sessions and sectional meetings. Each state set objectives for changes needed in T & I preservice and inservice professional development activities in their own state. In addition, the state change agent teams planned implementation activities and made personal commitments for involvement in their state's implementation of needed changes. (Representative titles of papers included in this report are "Psychological Skills and Work Attitudes Needed by Effective T & I Teachers in the Year 1979," and "Professional Development and Management Training for Teaching and Administrative Personnel." (BL)

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Final Report
Project No. WI-V-9
Grant No. G05-75-000 46

NATIONAL CONFERENCE FOR TRADE AND INDUSTRIAL EDUCATION PROFESSIONAL PERSONNEL

Theme:

ISSUES WITH IMPLICATIONS FOR PROFESSIONAL DEVELOPMENT ACTIVITIES

Dallas, Texas
January 13-15, 1976

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ACKNOWLEDGMENTS

Special recognition is given to the assistance provided by the conference PLANNING COMMITTEE in the identification of national issues, selection of conference participants, and selection of conference consultants.

The CONFERENCE PARTICIPANTS are also commended for their contributions. The effort that they expended in pre-conference data collection, conference workshop sessions, and post-conference implementation activities have made this conference truly a working conference.

We wish to thank American Motors Corporation, the International Union of Bricklayers, Masons and Plasterers, and General Motors Corporation for enabling key personnel to assist us in conference planning and delivery. MR. FRANK PRIMEAU, Manager, Owner Services, American Motors, participated in pre-conference planning. MR. MERLIN TAYLOR, Training Director of the International Union of Bricklayers, Masons and Plasterers, was a panel member during the conference. DR. CHET FRANKE, Director, Education Systems Planning, General Motors Corporation, was a panel member and discussion group participant during the conference.

MS. ANN PENNINGTON, Executive Director, Texas Industrial Vocational Association, assisted with local conference arrangements and authored an article summarizing the conference for the A.V.A. Journal.

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MR. BILL DENNIS, Educational Programs Specialist, U.S.O.E. did much of the foundation preparation that made this conference a reality. His initial Ad-Hoc T & I Planning Committee laid the groundwork for the conference planning committee. In addition, his assistance during the selection of planning committee members and selection of participants was definitely service above and beyond the call of duty.

CHAPTER I: INTRODUCTION

SUMMARY

The National Conference for Trade and Industrial Education Professional Personnel was funded through a U.S.O.E. grant under Part F, section 553 of E.P.D.A. Each state and U.S. territory was allowed to send four participants.

The conference was held in Dallas, Texas on January 12-15, 1976. Participants included 162 T & I professionals from 37 states, the District of Columbia, and the Virgin Islands. This was a working conference. Participants were involved in pre-conference data collection, conference workshop sessions on planning and change implementation, and sectional meetings on issues of national concern. Each state set objectives for changes needed in T & I pre-service and in-service professional development activities in their own state. In addition, the state change agent teams planned implementation activities and made personal commitments for involvement in their state's implementation of needed changes.

PURPOSE

The Problem

Developments in science and technology are causing some workers to become obsolescent as old jobs disappear, new occupations emerge, and competencies and performance levels change. The pressures of a rapidly changing technological society make curriculum revisions by staff, and program planning by administration even more dependent on research, occupational, job and task analysis. In addition, administrators and planners are faced with the problem of keeping their staff up-to-date with the technology they are teaching. The question is how should the quality of occupational competence be certified upon becoming a teacher and periodically thereafter? The problem facing Trade and Industrial Educators today is maintaining relevancy of content and providing teachers who are trade competent in what they teach.

The goal of this project was to identify, prioritize and address critical problem areas and needs in Trade and Industrial Education. The results provide implications for the development of personnel who have the competencies to teach and administer educational programs with relevant content based on the skills and knowledges necessary for success in the world-of-work.

Need for Assistance

In vocational education there are two requisities for the successful teacher. He or she must know what is to be taught and how to teach it. In Trade and Industrial Education, initially the teachers usually have up-to-date occupational experience but often are not prepared to organize,

present and evaluate instruction. There are two apparent reasons for this. First, in order to fill vacant positions, administrators recruit people direct from employment to work as teachers with little or no preparation pedagogically. Secondly, the universities have been slow to recognize the need to develop programs to prepare for and up-grade teachers in the less prestigious, but shortage fields of vocational education, particularly Trade and Industrial Education.

Thus, there is a need to certify the occupational competence of Trade and Industrial Education teachers at the time of initial employment and periodically thereafter and to develop a systematic plan for providing the pedogogical skills other than through the traditional haphazard method of the university classroom.

Recruitment of minority group instructors into Trade and Industrial Education is a problem area to be considered if vocational education is to meet the needs of all youth and adults. There is a critical shortage of such instructors nation-wide. Techniques for recruiting minority group instructors for teachers of Trades and Industries need to be developed.

A communication system needs to be developed which will allow for greater geographic mobility of graduates and Trade and Industrial Education teachers. A system of communication devices needs to be developed that will communicate the occupational competencies of teachers as well as graduates to those who may have use for such information. Such a system should communicate the competency levels of graduates from a program to employers or to another level of education if such is the goal of the graduate. In addition, the system should communicate the competencies a

Trade and Industrial Education teacher has attained so that he or she may receive an equitable share of college credits for having developed the competencies through an alternate mode. Also, this system should disseminate effective strategies and experiences used to enhance the professional growth of T & I personnel.

GOALS AND OBJECTIVES

Goal #1

To identify, prioritize, and address critical problem areas and needs in Trade and Industrial Education with major emphasis upon implications for personnel development.

Conference Objectives for Goal #1. At the completion of this conference, participants will have:

1. Completed a 5-year systems design for Trade and Industrial Education personnel development in their state in which the key result milestones are consistent with state 5-year objectives in Trade and Industrial Education. This system design will include three main sections:
   a. an identification of critical problem areas and needs in Trade and Industrial Education personnel development.
   b. an identification of the existing status of state Trade and Industrial Education personnel and personnel development.
   c. a plan which specifies how the state will move from their existing system (see "b" above) of personnel development to a revised system which will result in personnel prepared to alleviate the critical problem areas and needs (identified in "a" above).
2. Completed specific two-year state milestone plans with priority decisions made covering the allocation of personnel and financial resources.
3. Divided short range state implementation responsibilities among state participants and translated those responsibilities into

individual results, orientated implementation objectives and activity plans.

4. Cross correlated their state's Trade and Industrial Education personnel development goals with the goals of other states in their region, and identified areas for mutually beneficial personnel development activities.
5. Completed specific one-year regional plans with priority decisions made concerning allocation of resources.
6. Divided short range regional implementation responsibilities among regional participants, and translated those responsibilities into individual results orientated implementation objectives and activity plans.

Goal #2

Participants should be encouraged to develop at least a rudimentary communications network.

Conference Objectives for Goal #2. At the completion of this conference, participants will have:

1. Identified the key people in their state, and their region, who will be needed to successfully implement Trade and Industrial Education personnel development changes.
2. Involved those key people in brainstorming of a Trade and Industrial Education critical problem areas in the state and in the region.
3. Analyzed their own personal group interaction patterns in terms of + - task, + - human relationships, task leadership,

guidance leadership, human relations leadership, and scapegoating.

4. Practiced the use of personal role pattern changes during the clarification, evaluation, and decision making phases of the planning activity.
5. Maintained and strengthened the existant (+) aspects of group communication climate; explored and resolved any conflicting interests which precipitate a (-) communications climate.

Summary of Results Expected

1. Each participating state and territory will have a list of critical needs in T & I identified.
2. Each participating state and territory will have a personnel development plan and implementation strategy.
3. The participants will learn a scientific planning process.
4. Participants will be more aware of the needs and problems related to personnel development.
5. A communications system will have been established.

THE GENERAL PLAN

Planning Committee

A planning committee of T & I professionals representative of the ten U.S.O.E. regions was selected. Representatives from industry and labor were also selected. This group was provided with a summary of significant T & I issues from 1968-75, and asked to prepare for a meeting of the planning committee by interviewing key T & I professionals in their respective regions. The planning committee then met for two days to plan the National T & I Conference. Results of that pre-conference meeting were:

1. A list of current critical national T & I issues with implications for professional development.
2. Potential research consultants and presenters for these issues nominated.
3. The date and location for the national conference were selected.
4. Procedures for selection of conference participants were identified.

Planning committee members are listed in Appendix A. Appendix A also includes copies of all planning committee materials and the notes from the planning meeting.

Participants

Each state and territory was invited to send a four member change agent team comprised of a classroom Trade and Industrial Education teacher, state staff member (Trade and Industrial Education area), teacher educator,

and Trade and Industrial Education coordinator or supervisor. One staff member from each of the regional U.S.O.E. offices was invited. Also, two staff members from the U.S.O.E. were invited. Approximately 250 persons were invited to participate in the workshop.

Representation from these groups and agencies provided a broad base for sustaining a communications network for continued personnel development. In addition, the varied perspectives brought to the workshop helped to assure a rich exchange of ideas. A list of conference participants is included in Appendix B.

Pre-Conference Data Gathering

Upon accepting an invitation to be a participant in the National T & I Conference, each participant was sent a packet of interview forms to use for data gathering in their state. The participants each interviewed five T & I professionals in their state concerning the relative importance of each national T & I issue to their own state. State interviewees were also able to suggest critical professional development issues in their own state that might not have been prominent in the national survey. Thus, a total of twenty-four T & I professionals were involved in identifying critical issues for each state. All pre-conference data was summarized by state, U.S.O.E. region, and nationally for use by state change agent teams during their planning activities at the national conference.

Conference Activities

Participants were involved in two types of activities at the national conference. First, each state change agent team was involved in workshop

activities designed to aid them in planning and implementing needed T & I professional development changes in their home state. The state teams used data that they collected prior to the conference in four planning work sessions as follows:

1. Systems Design in Educational Planning: a Gap Planning Process.
2. Key Results Area Planning: the Setting of Priorities.
3. Leading Groups: Change Agent Tools for Leading Decision Making Groups.
4. Power and People: Identifying and Using Professional Power to Implement Change.

The second type of activity that participants engaged in involved sectional topics on critical T & I issues of national importance. These topics were;

1. Principles of Effective Leadership for Vocational Youth Organizations
2. Key to Success: Evaluation
3. Professional Development and Management Training for Teaching and Administrative Personnel.
4. Development and Implementation of a Coordinated Program of I.A. and T & I.
5. Psychological Skills and Work Attitudes Needed by Effective T & I Teachers in the Year 1979.
6. Competency Based Teacher Education.
7. Teacher Awareness of Standards: Nationwide Consistency of Policies and Standards.
8. Articulation in Industrial Education.

Post-Conference Evaluation

Post-conference evaluation was conducted by both participants and staff. Participants were asked to evaluate workshop and sectional meetings. Conference staff were also asked to evaluate these same conference elements from their perspective. In addition, conference staff consultants engaged in ongoing evaluation-coaching with their assigned state teams to enable each state team to complete an acceptable professional development implementation plan for their home state. No evaluation of the extent of plan implementation in each state was conducted due to limitation on project funding and time.

CHAPTER II: PROGRAM AND PROCEDURES

PRE-CONFERENCE DATA COLLECTION

Participants were asked to survey their home state to gather data concerning critical T & I issues, prior to attending the national conference. This survey was initiated for the following reasons:

1. To validate, or repudiate, issues generated by the planning committee.
2. To highlight those national issues most significant to each participating state and U.S.O.E. Region.
3. To highlight those issues with the most implications for pre-service and in-service T & I professional development activities.
4. To involve more T & I professionals within each state in the planning activities.

Of the four reasons listed for pre-conference data collection, the most important reason was number four. If the National T & I Conference was to eventually result in actual implementation of needed professional development changes in each state, more than four T & I professionals had to be involved in each state. The survey was actually contrived as a consciousness raising change agent strategy for the state change agent team. The pre-conference data collection survey actually resulted in strengthening or initiating communication linkages among each state's T & I professionals.

The initial critical T & I issues used to formulate survey questions were generated by the national planning committee. The participants were provided with the survey questionnaire and instructions, included in Appendix C.

Participants interviewed each respondent in person or by telephone. A total of 499 T & I professionals were surveyed nationally. Total respondents for each U.S.O.E. Region are shown in Table I.

TABLE I

U.S.O.E. Region	I	II	III	IV	V	VI	VII	VIII	IX	X
Survey Respondents	43	24	21	76	88	69	37	71	30	40

The national response tended to validate the preliminary work done by the national planning committee. Of the fourteen issues generated by the national committee, no issue received a mean score lower than 3.60 on a five point Likert scale.

Issue 1.01, Professional Development for Leadership in Student Organizations, and Issue 1.08, Leading Groups, were the two issues receiving the mean scores of 3.60. The issues receiving the highest national scale score were: Issue 2.02, Keeping T & I Instruction Current With Industry ($\bar{\bar{x}} = 4.48$); Issue 1.02, Key to Success: Evaluation ($\bar{\bar{x}} = 4.18$); Issue 1.03, Professional Development and Management Training for Administrative Personnel ($\bar{\bar{x}} = 4.14$); and Issue 2.03, Competency Based Teacher Education ($\bar{\bar{x}} = 4.22$).

Regional evaluation of issue cruciality showed more dispersion, as per results shown in Table II on the following page.

However, again each region tended to validate the work done by the national planning committee. No issue received a lower regional evaluation than $\bar{\bar{x}} = 3.08$.

SUMMARY OF PLANNING DATA

1.0 ADMINISTRATIVE: PROCESS AND CONTENT ISSUES	Region										National
	I	II	III	IV	V	VI	VII	VIII	IX	X	
1.01 Professional Development for Leadership in Student Organizations.	3.09	3.55	3.69	3.72	3.37	4.13	3.19	3.60	3.97	3.54	3.60
1.02 Key to Success: Evaluation	4.39	4.21	4.48	4.13	4.36	4.14	4.23	3.98	4.17	3.91	4.18
1.03 Professional Development and Management Training for Administrative Personnel.	4.15	4.09	4.30	4.12	4.35	4.12	4.18	4.03	4.12	3.96	4.14
1.04 Development and Implementation of a Coordinated Program of I.A. and T & I.	3.55	3.50	3.87	3.92	3.53	3.94	3.65	4.08	4.03	3.22	3.75
1.05 Effective Planning of In-Service Programs.	4.15	4.04	4.32	4.05	4.05	4.28	3.99	4.11	4.13	4.12	4.12
1.06 Identification and Clarification of the Objectives of T & I Education.	3.93	4.12	4.25	4.14	4.08	4.27	3.83	4.07	4.01	4.20	4.10
1.07 A Systems Approach to Key Results Area Planning: the identification of program priorities and posteriorities.	3.95	3.45	4.11	3.79	3.80	3.78	3.64	3.55	3.77	3.56	3.74
1.08 Leading Groups: group dynamics techniques for use with advisory committees and in educational decision making.	3.62	3.54	3.97	3.61	3.44	3.91	3.46	3.51	3.57	3.57	3.60
1.09 Power and People: techniques used by educational change agents to identify the legitimizers needed for implementing changes in educational systems.	3.78	3.63	4.32	3.87	4.02	3.61	3.48	3.55	3.08	3.64	3.72
1.10 Other.											

SUMMARY OF PLANNING DATA

2.0 TEACHING: METHODOLOGY AND CONTENT ISSUES	Region										National
	I	II	III	IV	V	VI	VII	VIII	IX	X	
2.01 Teaching psychological skills and work attitudes needed by effective T & I teachers in 1979.	4.18	3.96	4.32	4.05	3.98	4.21	3.76	4.07	4.13	3.84	4.05
2.02 Keeping T & I instruction current with industry.	4.52	4.22	4.40	4.27	4.69	4.77	4.56	4.56	4.07	4.15	4.48
2.03 Competency Based Teacher Education	4.00	4.29	4.03	4.31	4.10	4.25	3.99	4.30	4.67	4.23	4.22
2.04 Teacher Awareness of Standards: National consistency in certification, curriculum, and job entry level standards.	3.76	3.84	3.80	4.10	3.68	4.10	3.74	3.99	3.87	3.69	3.88
2.05 Articulation in Industrial Education.	3.63	3.66	4.09	4.28	4.05	4.08	3.76	4.16	4.23	4.11	4.04
2.06 Other											

1 = Not Important
2 = Minor Concern
3 = Routine Importance
4 = Major Thrust
5 = Very Critical

Although a number of other issues were suggested in individual states, none of these issues showed enough national interest to use it as a topic at the national conference. Of the fourteen issues identified, thirteen were treated during the national conference. The remaining issue, Effective Planning of Inservice Programs, was not on the final conference agenda, due to a late cancellation by the topic presenter.

During planning sessions at the national conference, state change agent teams were provided with national and regional data, as well as their own state's data to use as a basis for planning professional development changes in their state.

KEYNOTE PRESENTATION

IDENTIFICATION AND CLARIFICATION OF THE OBJECTIVES OF TRADE AND INDUSTRIAL EDUCATION

Dr. Byrl R. Shoemaker

I accepted the opportunity to address this gathering of leaders in trade and industrial education with a great deal of pleasure. It has been too long since the leadership in trade and industrial education has been brought together from over the nation to think critically and constructively about methods of extending and improving trade and industrial education programs. My background includes experiences as a teacher, a local supervisor, an area supervisor, a teacher educator and a state supervisor of trade and industrial education before I was given the opportunity to serve as state director of vocational education. In my present position I still retain a direct interest in and a responsibility for trade and industrial education, but the leadership for that phase of our program in Ohio is under the direction of the very capable Harry Davis.

Trade and industrial education is part of the whole of vocational education, and any discussion concerning T&I must relate to the whole. Before addressing the issue of trade and industrial education, I must first address an issue in vocational education and raise the question of how important is vocational education? Unless the program is important in terms of the future of our nation and the future of people we are only playing games to keep ourselves employed, to keep youth and adults amused and to serve merely as another layer of educational bureaucracy. Vocational education, including trade and industrial education, has been part of the educational scene in America

officially since 1918. It has, however, been a very significant example of tokenism in the field of education. Only with the passage of the Vocational Education Act of 1963 and the subsequent Vocational Education Amendments of 1968 has there been any significant change and growth in vocational education which could be classed as more than a token effort in serving the needs of youth and adults. The Vocational Education Acts of 1963 and 1968 required significant changes in vocational education. Change means conflict, whether it is changing the minds of those who are giving leadership to vocational education as the first chore, or the necessity for changing the minds and attitudes of both educators and the public as significant efforts are made to provide enough vocational education to make a difference

I think we can look to England to get an example of what America might be in the future unless there is a return to the concepts of the importance of work, a development of even greater skill capacity on the part of the citizens, and the encouragement of the willingness to produce on the part of all people. An author who recently visited England and went into business in that country returned after four years and in an article made these statements: "My little sojourn in the British Welfare State was a financial disaster. As an American writer, accustomed to making money in direct proportion to how hard I am willing to work, in England I found that I could work until my nails bled and I still wasn't going to finish ahead. No way. In fact, I found that I was cleaned of my life's savings. What's against you in England? Just about everything--the law, economics and an unrealistic government." Later on in the article he states, "First the

power workers went on strike and lights, heat, etc. were available only on alternating three-hour periods. This hurt business. I had to return to the United States to mail my articles because the British postal strike lasted six weeks. Next the state government passed a 10 percent sales tax. This made things so expensive that again business went into a slump. This was followed by doubled real estate taxes, higher telephone rates and electrical costs. Even the cost of postage stamps were doubled. Inflation was running at a steady thirty percent annually."

Unless there is a significant change in America the above will be an exact report of our nation twenty or thirty years from now. For years the cutting edge of our nation in competition with other nations of the world was our ability to outproduce those nations. We outproduced them in terms of both our people and in the development of machines. Studies, however, of the growth rate real output per man-hour indicate that the United States of America is no longer number one. It is not number two, three or four. As a matter of fact, it is number twenty--dead last among the developed nations of the world, a great nation, who taught productivity to the world, dead last. Before you point the accusing finger at our machines, studies done over a number of years indicate that growth rate in real output per man-hour is affected only fifteen percent by machines, and eighty-five percent by people. We have lost millions of jobs overseas as the workers in other countries have become productive enough that they can now produce things more cheaply and better than we can and sell them back to our country because of our large market.

Within Ohio, the laws and policies of our state say that vocational education is important. We have a law which establishes a mandate that every school district in the state of Ohio must provide an adequate program of vocational education. Our State Board of Education, under the leadership of the finest state superintendent in the nation, Dr. Martin Essex, established meaningful standards that said an adequate program meant no less than 12 programs and 20 classes. Within our state the six hundred twenty-five school districts have been reorganized into one hundred one vocational education planning districts. This past fall the State Board of Education took the unprecedented action of assigning the last forty-six districts not meeting the legal mandate to operating joint vocational school districts when those forty-six districts had not met the goal of providing for an adequate program for the youth enrolled.

Given the acceptance of the importance of vocational education, and given an understanding of the facts needed to express this importance to others, a next factor in the clarification of objectives is the determiniation of a philosophy. What is your philosophy of vocational education? Any philosophy of trade and industrial education must flow out of and be related to a philosophy of vocational education within your state. In ohio we have established a philosophy of vocational education which has been shared with and is supported by both the state and local vocational education leadership within our state. Our philosophy of vocational education is as follows:

1. The nature of work in our technological society requires formal preparation for entrance into the work force. Vocational education, therefore, must be a significant part of the educational system in our society.
2. Vocational education is essential for and must relate to the productivity of people, not only in competency related to an occupation, but in the attitude towards that occupation and a willingness to produce.
3. The uniqueness of vocational education is in preparation for work which permeates the vocational programs at both the high school and post-high school level.
4. Vocational education programs must be available for youth 16 years of age and older at both the high school and post-high school levels and for adults throughout the work life of the individual.
5. Vocational education is an important part of the educational program, and the nature and quantity of vocational education must be in keeping with employment patterns and trends locally, state and nationally, in that order.
6. Both the competencies and the interests of the individual must be considered, but the opportunities within the needs of society in which the individual will participate must be considered as vocational education programs are established.
7. Instruction within vocational education programs must be compatible with educational theory and principles of learning growing out of research in psychology and education.

8. Vocational programming requires a time commitment of sufficient length and intensity to provide instruction in the several domains important to the successful entrance of the student into and their progress within the occupation of their choice.

9. An effective vocational education program requires competency in reading, writing and arithmetic and experiences leading to a sound occupational choice.

Summary - Vocational education programs, based upon the principles outlined, must be provided for all eligible age levels, all ability levels, in all sections of a state and the nation. Programs must be occupationally based and designed to meet the needs of both an individual and the society in which he exists. Vocational education starts with the job and ends with the student successfully employed on the job.

As you identify and clarify objectives of trade and industrial education, you must be concerned about the scope of trade and industrial education. How broad is the program that you are going to offer? Within our state we have worked on the concept of management by objectives. The concept of management by objectives simply means, "What are you going to do, for whom, for how many, by when and how much will it cost?" We must establish such objectives for the total of vocational education in such areas as vocational education for youth, vocational education for adults, vocational education covering all ability levels, vocational education for different age levels, vocational education for all areas of the economy, and for home and family living. Objectives for such groups have been identified and quantified, and dollars and cents put with them.

Trade and industrial education then has the responsibility of identifying and clarifying its objectives within the framework of the total program of vocational education within our state. The breadth of the program becomes of significant concern to us. As we have grown in trade and industrial education in terms of numbers of youth and adults served we have been able to broaden the number of offerings for such persons. For the last five years we have made available funds to each of our vocational education services, including trade and industrial education, in order to enable them to fund the equipment for a brand-new program not offered any place in the state of Ohio. The goal of this effort has been to identify the new, evolving developing areas and to encourage other districts to consider including these programs within their offerings.

In any set of objectives for trade and industrial education there must be a commitment to quantity. Quality is essential. Quality is important, but without quantity the effort may be no more than a toy approach when real tools and machinery are needed. The State Board of Education in our state has established at the secondary level a standard of requiring sufficient facilities so that no less than forty percent of all youth age 16 and above can be served by job training vocational education programs in Ohio. Interestingly enough, trade and industrial education is identified as having a responsibility for forty percent of the job training within the whole of vocational education on the basis of the percentage of the work force in our state that are in trade and industrial occupations. At the adult level we have established for all of vocational education a goal of providing for upgrading and retraining programs for seven percent of the work

population annually. Again, trade and industrial education has the responsibility for providing for forty percent of that effort. The total effort in the adult field of trade and industrial education includes preparatory programs for adults, apprenticeship programs, upgrading programs and retraining programs.

Annually, we determine our progress towards our goals and set our needs for funding on the basis of funds needed to achieve those goals. For a total vocational education program in the state there are thirteen objectives. Trade and industrial education is concerned with and has input to those objectives dealing with job training at the secondary level, job training for disadvantaged and handicapped, and job training in the area of both postsecondary and adult programming. Trade and industrial education has supportive roles to play in the other objectives.

In addition to objectives for quantity, we have been establishing objectives for quality of vocational education. Our objectives for quality vocational education are expressed through the standards that have been established to guide the organization and operation of the program. We believe that there are four factors that control the quality of vocational education in Ohio. The four factors are:

1. facilities and equipment
2. curriculum
3. teaching staff
4. students

Within Ohio over $455 million has been spent since 1965 to provide adequate facilities and equipment essential to provide for growth of services to both youth and adults. There was no way in our state to grow in vocational education to the point where it was an important part of the educational program without a significant growth of facilities and equipment. This expenditure of $455 million has been on a matching basis of state and federal dollars to locally voted dollars. In every area in which dollars were expended, there first had to be a voting of local dollars. The matching funds from the state included $77,818,243.00 from federal vocational funds and $156 million from state funds. These dollars, through the formula pattern used within our state, were matched with $208,440,130 of local funds.

Our State Division of Vocational Education accepted the responsibility for providing leadership in the development of such facilities and equipment. Guidelines were established at our state level with regards to the average, the maximum and the minimum size of vocational education facilities for each of the vocational education taxonomies in all areas of vocational education, including trade and industrial education. Every plan for construction of vocational education facilities was reviewed at the state level by representatives of the trade and industrial education service under an effort coordinated by Mr. Frank Oliverio, Assistant Director for Construction. Likewise, the minimum amount of expenditures of funds for equipment was identified at the state level, even though we could not provide the exact list of tools and equipment needed for each of the occupational areas. Our vocational education facilities should be directly related to the type of facilities and equipment that the youth would find when they left the training program.

We have not had a standard building program throughout the state. Every area had its own architect, but through the efforts of our state review pattern construction costs were kept to less than $25.00 per square foot, with much of the construction being considerably less than that figure.

The second program factor, curriculum, has a great effect on the quality of the program. We have standards within Ohio which encourage depth of instruction in vocational education. Over fifty percent of our trade and industrial education programs provide for four and a half hours per day of instruction, three hours in laboratory and an hour and a half in class. Skilled occupations require this type of time investment if we are to build a curriculum which will provide for the development of competence in the psychomotor, the cognitive and the affective domains important in the preparation of persons to enter employment as advanced learners. We will make adjustments in the time standards for programs of low skill. One of our programs, however, which deals with youth who cannot or will not fit in any skill program, still has a requirement of four and a half hours per day because the young people need supportive education in order to become employable.

We encourage the organization of the curriculum on a core program concept in which the goal of the student becomes the center of the core. The skills, the technical knowledge, the work habits and attitudes are then built into a program around that goal. Programs are approved in our state on the basis of standards. Each program is reviewed and approved each year on the basis of a standard form submitted by the districts to our Division of Vocational Education. The review and

approval of trade and industrial education programs becomes the responsibility of Harry Davis and his T & I staff.

The third program factor is that of the teaching staff. The standards for teachers of trade and industrial education are identified within the teacher certification standards for all teachers in the state of Ohio. One basic factor underlies all of the qualifications for teachers of trade and industrial education, and that factor is occupational competency. We do not believe that a person can teach what he doesn't know. We do not believe that a person can adequately train a young person for competence in an occupation if the instructor has not worked at that occupation. Certain cooperative programs, in which the students gain the skills on the job rather than through the laboratory, have lesser occupational qualifications than for the skilled trades areas. Work experience is required even of those teachers, however in order to assure an understanding of the nature of the work into which the young people are placed. We do, then, have a significant vocational teacher education program and I believe that we make a greater investment in teacher education for trade and industrial education than any other state in the nation. Our State Division of Trade and Industrial Education has contracts with five universities and through these contracts they share the costs with the universities of 32 teacher educators. Persons under these contracts are committed to provide full time services in trade and industrial teacher education with most of the effort being inservice education. We do not just hire a person from an occupation and throw him into a classroom with the assumption that his skills have made him a teacher.

The fourth program factor is related to students. A plan is needed for student recruitment and enrollment and for student services based upon our goal of employability. Such services may include guidance and counseling, remedial reading, remedial math and should include remedial health services. To date, however, we do not have any way to assure remedial health services and the Bureau of Vocational Rehabilitation will have nothing to do with youth until they drop out of school and become a charge to society. Placement and followup services also are necessary for students enrolled in vocational education. Vocational education is not a "general" subject.

The goal of vocational education is to prepare people for jobs. While vocational education does make a significant contribution to the development of the total youth, in Ohio I am directed to provide a vocational education that prepares youth for jobs or youth for useful work in the home. The day that I wish to become a "generalist" the state legislature will cease to make investments in vocational education.

Our efforts in vocational education are justified. If you look at the principles of learning which should govern all education you find a sound basis for vocational education programs:

Principles of Learning

> We learn best when we are ready to learn. When we have a strong purpose, a well fixed reason for learning something, it is easier to receive the instruction and to make progress in learning.
>
> The more often we use what we have learned the better we can perform or understand it.

If the things we have learned are useful and beneficial to us so that we are satisfied with what we have accomplished, the better we retain what we have learned.

Learning something new is made easier if the learning can be built upon something we already know. It is best to start with simple steps which are related to things we can now do or which we already understand, and progress to new and more difficult tasks or ideas.

Learning takes place by doing. Before the learning can become complete, we must put into practice what we are attempting to learn.

Research on the college preparatory program has failed to prove that this college preparatory program is even the best way to prepare for college. Thirty years of research has failed yet to prove that the college preparatory program is sound in anyway. I do not, therefore, want to restrict the development of a sound vocational program on the basis that it might interfere with the real educational program, the "college preparatory program." I have no respect for the present college preparatory program. It has no basis in concepts of learning or in research.

Facts regarding the composition of the work force support the need for a broad program of vocational education. Facts within our state indicate that only 4.6 percent of the jobs are unskilled, and only ten percent of the jobs require a baccalaureate degree. This would indicate that approximately eighty-five percent of the jobs in my state

require a vocational or a technical education. There are presently in our nation over a million jobs unfilled, and yet there are within our nation several times that many people unemployed. The basic problem is that the people who are unemployed do not have the skills, the knowledge or the attitudes required to participate in the jobs that are available.

I call for a depth of skills in any vocational program rather than a mere sampling of skills in many occupations for the purpose of "flexibility." There is no evidence that a little sampling of many things makes a person "flexible." As a matter of fact, the only research project that I know that relates to this concept indicated that a worker was more flexible if he had learned one area to depth, rather than floating lightly over many areas. The results of the research makes sense. A person who has learned an occupation to depth knows the amount of time and effort that must go into gaining the skills and knowledges for competence. I do not believe that we need to apologize in any way for a sound vocational philosophy and sound standards as we attempt to build a program to match our modern technological society.

Within our state we have been attempting to develop a career development continuum. The total thrust of vocational education has been directed towards a concept of education for chance through a sound home and family life program, involving not only education for girls and boys within the junior high school and high school level, but a program of parent education and inner-city family life education which has reached into every major city in Ohio and into several of the rural areas.

The second thrust within our career development continuum is the area of education for choice. As we began to expand the quantity of vocational education it became obvious that if we were to succeed with an expanded program of vocational education there had to be improvements in the earlier years of education so that young people would have a better way of making vocational choices at age 16. To this end we built what we initially called a system of vocational education and guidance, but which we have since changed to the terminology of "career education," since our concepts closely paralleled those promoted by Dr. Marland. We believe in career motivation in Grades K-6 in order to help all young people learn to respect all work and to be motivated to want to do something. At the 7th and 8th grade level, we believe in a process of orientation to the nature of jobs and work that are available. In Grades 9 and 10 we encourage a pattern of exploration for youth, both in school and out of school, to enable them to sample at least three different areas of occupational choice.

The third thrust within our pattern of career development continuum is the area of a broad vocational education program in which any boy or any girl who wants to participate can find a program in which they can succeed. Beyond high school we also see the continuation of this preparatory effort through technical institutes and full time adult vocational programs, all leading to competency for employment.

The fourth stage in our career development continuum is that of retraining and upgrading for adult workers throughout their total work life. We do not believe that the career development is all of education, but we believe that the career development continuum is an essential

part of any educational program and that no educational program can be identified as comprehensive if there is not an adequate quantity and quality effort made in the area of education for chance, education for choice, education for work and education for upgrading and retraining.

We do believe in planning and we believe that such plans must include the identification and clarification of objectives and how those objectives will be achieved. We have a State Plan for Vocational Education in which the objectives for the state level are stated, quantified and costs are identified. We have local education area plans for each one of the 101 vocational education planning districts. We have provided them with data on trends related to vocational education taxonomies and they in turn have developed a plan for their particular vocational district.

We have an evaluation pattern identified as PRIDE--Program Review for Improvement, Development and Expansion, in which every district will be visited and evaluated once every five years in depth on the basis of both the state goals and local goals.

We are very fortunate in Ohio. We have had the support of the governor, of the state legislature, of a fine state superintendent and the State Board of Education. With that kind of support we had better do a good job. Within Ohio Governor James A. Rhodes, who was the moving force in the 60's in expanding the vocational education program in Ohio, recently appointed a Youth Task Force on Jobs. He is concerned that the direction of employment in our state will not provide enough jobs for youth. He believes that the only alternative to jobs is welfare. This

Task Force includes two persons each from the five vocational youth organizations and two each from the Junior Achievement, 4-H clubs, Explorers and Scout groups. This group of young people is charged with making a report to the governor by September 1, 1976. It is a thrill to work with this group of young people and I believe they will come forth with a very significant report.

I am very fortunate. I am in a field which I chose. I am working at a job in which I believe the outcome is important. Some may say that I have "Smith-Hughes" tattooed across my back, but no one has yet told me a good alternative to a vocational program which is designed to give the youth the skills and technical knowledge, work habits and attitudes essential for employment. The educational system of today perhaps has gotten too far from the area of reality. I would recount for you in abbreviated form a story known as the "Saber-toothed Curriculum."

"Many years ago life was difficult for persons who populated the earth. Men spent their full day from dawn till dark doing three things: they had to work frantically to flip enough fish from the river in order to provide food for the family, to "clonk" enough ponies as they came down to the stream to drink in order to get the hides for clothing for the families and to build during the day enough pitch torches so that they could scare the saber-toothed tigers away from their caves during the night.

Old Ironfist was really good at his job; he was good enough that he occasionally had time to sit on the bank and watch others as they

continued their frantic work of flipping fish from the clear stream. One day Ironfist had an idea--why don't I begin to teach the children how to flip fish so that they will be able to do it as well as I can and perhaps as they grow older they will be good enough at the job so that they will not have to spend their full time as their fathers do in this type of work? So old Ironfist approached the town fathers, explained the proposition to them, with the proposition that they also do his work so that he could continue to eat and be clothed as he taught their children. After due consideration the town fathers, mindful of the skills that Ironfist had, agreed to the arrangement and everything began to work as planned.

The system initially worked very well. Young people were taught the very capable skills that Ironfist had. He taught them fish flipping, pony clonking and saber-toothed tiger scaring. The graduates took their place in the community, competent in their skills and sincerely appreciative of the benefits of their education. There came, however, a significant change in the headwaters of the river, and instead of a swiftly flowing narrow stream, it became a wide, muddy river in which it was impossible to use the same techniques of fish flipping that the people formerly had used; likewise, the change in the stream stopped the ponies from coming down to drink. They no longer drank from the river, but found their water elsewhere up higher in the mountains. Also, the change in the stream and the climate caused the saber-toothed tigers to move to another area.

Thus, the workers had to learn new skills for catching fish, new methods for stalking ponies and they had no need for means of scaring

saber-toothed tigers. Old Ironfist, however, continued to teach the students fish flipping, pony clonking and saber-toothed tiger scaring. He had to mock up a stream, since he could no longer use the real stream; he had to put a model pony on wheels and the torches became items of recreation.

The people finally began to grumble that they were doing Ironfist's work and he was teaching their children obsolete skills, so they formed the first PTA and a committee was chosen to meet with Old Ironfist. The committee met with Ironfist and pointed out that they no longer used the skills that he was teaching the youth, and they had to retrain them as they came to work in the very important job of getting food and clothing. The argument lasted long and waxed hot; Ironfist extolled the values of a cultural education and pointed out that he was teaching the youth the heritage of their forefathers. Finally, Ironfist drew himself to his full height, and with a withering look raised the question, 'What do you want me to do? Make this a vocational school.'"

The trade and industrial education programs of today and tomorrow must relate to the jobs that are available. They must not become exercises which relate only to the cultural heritage of the past. They must start with a job and conclude with the student placed on a job.

WORKSHOP PRESENTATIONS

SYSTEMS DESIGN IN EDUCATIONAL PLANNING: GAP PLANNING

Dr. Orville Nelson

Introduction

Problems, problems, problems - everywhere we turn we seem to encounter unmet needs and problems. One often gets the feeling that it is almost impossible to match available resources and solutions with our problems.

During the three days of this National T & I Conference, our staff will be presenting techniques and processes that will help:

+ Define problems and opportunities
+ Identify professional development needs related to the major problems and opportunities in your state as related to T & I education
+ Prioritize your professional development needs
+ Determine the persons who can help you accomplish your goals
+ Develop strategies and plans of action to achieve your goals

Systems Approach

Often during the study and analysis of professional development problems and opportunities in Trade and Industrial Education, we are struck by the massiveness of the needs and the lack of power we have to modify or drastically change what happens in this realm. I have observed in my work with vocational educators that those who are impressed by the complexity of problems and the multitude of variables which exist in our environment often times have significant barriers to effective planning. Granted, most problems

are very complex and one can establish a large number of factors which are related to a given problem; however, in most cases two or three variables accoun for many of the important dimensions of a problem or an opportunity. If one can clearly identify these variables, the planning process is greatly facilitated and the chance of successfully identifying a solution and achieving it are greatly enhanced.

One approach which is helpful in identifying the major facets in a problem or an opportunity situation is the systems analysis approach. The systems approach is concerned with the identification of the elements and their interaction in a given situation. This approach directs the problem solver to look for the basic elements or variables in a situation and their interaction. It also suggests that solutions can only be achieved by appropriate modification of each of the elements and the interactions. Systems analysis also provides a process for the hierarchical analysis of a situation. In other words, it provides a technique for determining the major variables involved in a situation and then further breaking these variables into more specific factors. As the process is carried to more detail, a hierarchical structure is identified which helps direct the planner in setting priorities.

The systems approach also implies that the modification of one variable or factor has an interaction and/or influence on the other variables in the system. Thus, it suggests that a problem or opportunity situation may be modified by influence or modification of a specific variable. This indicates that a person who has limited power may still have an impact on a total system through judicious exercise of that

power on the variable or variables over which the person has some control or influence.

Gap Planning System

The Gap planning process is a relatively simple technique that will assist the planner in identifying future goals, present status, and the activities which will be needed to reduce the gap between the status and goals. This planning process is concerned with answering three questions.

1. Where do you want to be?
2. Where are you now?
3. How do we move from where we are to where we want to be?

I find it most productive to first identify where I want to be. This should be specified in performance terms. In Figure 1, this step has been identified with Roman Numeral I. Statements in this segment of the plan will identify the performance or output level desired at a given point in time. In the initial planning phase, these statements may be rather general. However, as planning progresses, they must be refined to the point where there is general agreement among the planners concerning the outputs specified.

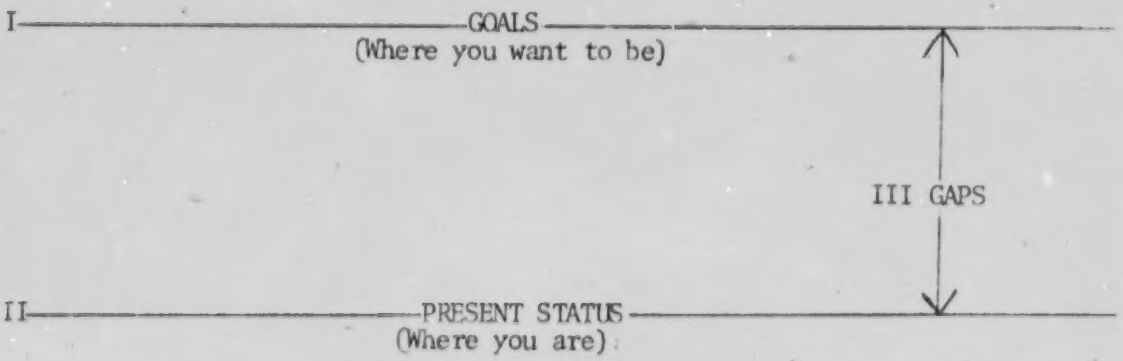

Figure 1: Gap Analysis System

My reason for starting with this element of the planning process first is that it allows one to think more creatively without being constrained by the weight of ongoing activities and the direction of present processes. At this time in the planning process, one should attempt to think more creatively and avoid being confined by present practices. The harsh realities of life can be brought into the planning process at a later stage.

The information and ideas for the general goal statements for this stage of the planning process may come from several sources. This morning, Byrl Shoemaker has done an excellent job of identifying a number of needs and problem areas as well as specifying several opportunities. One of the most important points apparent in his presentation is the central role of a well-defined philosophy. A philosophy will help to generate ideas for where you want to be and will also provide a gauge for judging and appropriatness of your goals.

Another good source of data is feedback from the persons who are involved with Trade and Industrial Education. Prior to this workshop, you and your colleagues worked to collect data on the critical issues identified by the planning committee for this project. The most critical need identified was keeping T & I instruction current with industry. The average response to this issue indicated that this was a very critical area (mean= 4.48, on a scale on which 5.0 represented very critical). Evaluation, competency-based teacher education, effective planning of in-service programs, and professional development management training were also identified as major issues.

A summary of the data from the pre-conference survey will be given to you for review in the sessions which follow. We have identified the average response given to each item. This analysis has a summary of the responses of the total group, and each of the ten USOE Regions. Additional issues suggested by the participants in the survey are summarized and included with the survey data.

In addition to the information presented here this morning and that summarized in the survey results, you will also need to take into consideration the unique information and insights you have on the problem and opportunity areas in your state. Each of you was selected based on your involvement and potential leadership role in T & I Education in your state. Therefore, you should also being your knowledge into use as you consider the goals for professional development in your state.

Several other techniques may be utilized to identify opportunities, problems, and assist in establishing required performance levels. A review of the mission or purpose of your unit, department and T & I Education may suggest areas where improvements may be made and will also help to identify the desired output levels. Information on what others are doing may also be helpful. One of the unique opportunities of this conference is the chance it provides for you to exchange ideas and gain new insights on what is going on in T & I throughout the country. Directives from local, state and national levels may specify certain required performance levels for T & I. For example, legislation and its interpretation play an important role in directing our work.

Various techniques for projecting needs and opportunities into the future may also be used. The straight line technique is most common but may not always be most representative of trends. It is not always possible to identify from historical and present data whether a trend is continuing, about to increase, or about to decrease. It is usually good practice to buttress straight line projections with additional information generated through one or more of the future viewing techniques such as Delphi and Scenario procedures. Close monitoring of technological changes may also assist in identifying new trends. After you have gathered information, it is necessary to analyze it and determine what is most appropriate and critical to your field. It is very easy to become mired in a large volume of data and never be able to initiate effective planning. The data presented from the pre-conference survey gives an indication of the magnitude of the issues. Also, your experiences and other data available will assist you in identifying those areas which are most critical areas and focus on those in your planning.

During the first phase of planning, the output statements or goal statements can be made in rather general terms. For example, in the area of evaluation, a general goal statement of "improve the competency of 80% of our T & I instructors in the area of performance testing by 1980" will be very adequate. These goal statements will be further refined as the planning process is carried out. Also, specific objectives will be identified related to each goal statement and these will more specifically identify the characteristics of the end products related to your goal.

After the goals have been established, the present performance level related to each of them should be identified (II in Figure 1). One or more of the following techniques may be utilized to identify present status. Usually it is advisable to utilize more than one of these techniques in order to avoid the biases which may be inherent in any one approach.

Most ongoing organizations have a fairly large volume of operational data. Most T & I programs will have data on enrollments, student characteristics, staff characteristics, retention rates, and follow-up. Often, however, these data are not organized in a format which facilitates planning nor are they always reported in a disaggregate basis. After systematic planning has been initiated and the types of data needed can be identified more precisely, an effort should be made to modify the types of operational data collected and to develop recording and reporting formats which facilitate the use of this information in planning. A well designed information system should reduce the problems just noted and provide more usable data for your planning.

You have a wealth of information available to you through your contacts with T & I educators in your state. This information should be used in your planning during this workshop.

In some of your states, you may have status studies available. These may have been completed by graduate students, state advisory council, or other agencies involved with vocational education. This type of study should give you information on the operational levels at the time the study was conducted, problems identified by the participants, and the opportunities for the enhancement of T & I. Since status studies

can be a valuable input, you should communicate with and co-operate with those agencies which sponsor or become involved with conducting status studies. Through this co-operation, you can assure that appropriate data are collected and reported in a format which will be of use to you.

Federally funded exemplary programs will have project reports which include an evaluation section. Also, many of these projects will have had a third party evaluator. The third party evaluator's report should also provide data which would be useful in your planning.

The evaluation reports developed for self evaluation or accreditation studies are also useful sources of data for planning. The reports of these studies usually provide detailed information on the present status of programs, problem areas, and unique accomplishments.

In summary, one should collect information on the status of T & I through a variety of sources. This will avoid the bais of any one source. Concurrent analysis of the data from these sources will typically identify areas in which there is a high level of agreement on the present status. In other areas you may find discrepencies in the data. These discrepencies suggest a need for further data gathering and analysis to determine the status.

After you have identified the present status, you can contrast this with a desired performance level you have identified in your goal statements. The difference between the two will be an indication of the level of need. In other words, the larger the discrepency between the two the greater your need. This is identified graphically in Figure 1, Roman Numeral III.

As will be noted in later presentations, the magnitude of this discrepency does not necessarily equate directly to a high priority. Zeke Smolarek will be discussing a process for determining priorities which involves an analysis to determine which goals involve tomorrow's breadwinners, today's breadwinners, yesterday's breadwinners, and sleepers. Goals which hold high promise for tomorrow (tomorrow's breadwinners) or may be more risky but have high promise (sleepers) should receive higher priority than those which are past their highest levels of promise (yesterday's breadwinners). Jerry Coomer and Ray Hansen will be discussing the identification of people, resources and techniques for working with people to accomplish your goals. After you have conducted these analyses, you may find it necessary to modify your goals or priorities or both in order to establish a logical plan of action.

In order to facilitate your planning activities in the initial workshop sessions, a work form has been developed. (See Figure 2). The left hand column of this form asks you to identify the critical professional development issue or issues for your state. As noted in my presentation, you may utilize the survey data collected in your state or region to identify these issues. In addition, our handout on the survey data has a number of specific issues suggested by the participants in the survey. You will want to review these to see if one or more of them apply to your state. Also, apply your expertise and knowledge in identifying these issues.

The next column asks you to identify your five-year goals in relation to each of the issues listed in the left hand column. Your goal

Figure 2: Needs Identification Form
CVTAE
1/2/76

State _____

Critical Issue	Five-Year Goals	Present Status	Priority

statements at this point in time may be relatively general. Remember that these should be stated in relation to professional development.

The next step in completing this form is to identify the present status of professional development in relation to the goals identified. You may find that it is not possible to precisely identify the present status because you lack the information to do so. If this is the case, estimate the present status and make a note that you will need to follow-up on this when you go back to your state.

The priority levels will not be identified during our next work session. After Zeke Smolarek has discussed key result areas and techniques for prioritizing goals, you will work on this area. Save your forms for the afternoon session at which time you will identify the priorities.

KEY RESULTS AREA PLANNING
ESTABLISHING PRIORITIES

Mr. Zenon Smolarek

Education is an arena where adaptation to external stress is critical for success, and it will require creativity and innovativeness for satisfactory response to changing conditions. If T & I is to renew itself and be responsive to the changing needs of society, then methods and means are required to identify key issues, assess and solve problems and thereby, adapt T & I and its objectives to changing goals. This is to be done while encountering the following stumbling blocks:

1. reduced real time available for decision making
2. increased need to limit time in execution of plans
3. limited resource availability
4. increased cost of operation
5. increased competition for available talent
6. increased complexity of educational requirements and tasks
7. increased demands for quality performance in achievement

Progress is also hampered by certain tendencies or weaknesses among which will be easily recognized by those familiar with the situation:[1]

1. A tendency in some places to make vocational schools and classes solely a dumping ground for defectives and delinquents.
2. A tendency in other places to make vocational training a minor

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[1]Prosser and Allen, "Vocational Education in a Democracy" New York: D. Appleton-Century Company, 1924, pp. 453-454.

part of the general course in education that prepares for more schooling and for college credits.

3. A tendency in other places to make both the mistakes just described.
4. An overweening desire by some local school authorities to have a Smith-Hughes school or department and have the use of federal and state moneys, which often leads them to establish vocational courses which are not feasible, do not meet required standards, or cannot be successfully maintained.
5. The transfer and use in vocational instruction of the traditional organization, procedures, content, and methods of regular education.
6. A tendency to focus local effort in some communities entirely upon the training of males to the neglect of females; and in others, upon females to the neglect of males.
7. A tendency to confine vocational work to small groups of adolescents who have not yet gone to work and to a limited number of trades and employments; and almost completely to neglect all youth and adults already employed as wage earners.
8. The utter isolation of some school officials and their vocational ventures from the occupations and trades of the community, particularly from those from which they are attempting to train young people.
9. Failure of some states and some local communities to provide adequate funds for the effective promotion, establishment,

equipment, maintenance, supervision, and expansion of the work.

10. The need of more, well-prepared, and experienced leaders in some states and communities, who have the vision, knowledge, resourcefulness, and courage which the task requires.
11. The need of more teachers having adequate trade experience, technical knowledge, and teaching ability.
12. As the most serious and far-reaching weakness, due to the inefficiency of some teacher-training institutions, some state and local leaders are being prepared through instruction given them almost entirely by teacher trainers who have had no experience whatever in either the teaching or the supervision of vocational schools or subjects and some of whom do not, in reality, "know what it is all about."
13. This is no less true of the efforts of such institutions to prepare instructors of practical and related vocational subjects.

These tendencies and weaknesses have existed, exist and will exist. That is to say that they are past, present, and future problems. Does This mean that they cannot be solved? Yes they cannot be solved, but they can be improved upon. They can be improved upon by becoming more effective in our problem solving. By doing first things first and by doing one thing at a time.

There are several reasons why we sould conentrate on one thing at a time the most obvious of which is that there are always more problems to solve than time to solve them. Effective problem solvers know that they have to get many things done - and done effectively. Therefore, they

concentrate - their own time and energy as well as that of their organization - on doing one thing at a time, and on doing first things first.

The first consideration for the concentration of efforts is to phase out the past that has ceased to be productive. Good problem solvers periodically review their work programs and ask: "If we did not already do this, would we go into it now?" If the answer is "Yes", they continue it. If the answer is "Maybe", they curtail it. If the answer is "No", they discontinue it. They make sure that no more resources are being invested in the no longer productive past.

We are all forever bailing out the past. Today is the result of actions and decisions of yesterday. Yesterday's actions and decisions, no matter how courageous or wise they may have been, inevitably become today's problems, crises, and stupidities. This means we all must spend time, energy, and ingenuity on patching up the actions and decisions of yesterday. This takes more hours of the day than any other task.

We have no trouble getting rid of failures as they take care of themselves. Yesterday's successes, however, always linger on longer than they should. Bureaucracy is fed by yesterday's successes.

What we must first do is to identify the tasks to which we should devote effort. To this end, Peter Drucker[2] has developed the following identifying scheme:

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[2]Peter F. Drucker, The Effective Executive (Maryland: BNA Films) 5 film series.

1. YESTERDAY'S BREADWINNERS: These products or programs no longer contribute. They are kept in operation because of tradition. Everyone in the organization loves yesterday's breadwinner. They are obsolete. Nothing can prevent their decline.
2. TODAY'S BREADWINNERS: These products or programs always account for substantial volume. They are a large contribution to the organization. They still have some growth ahead, but require change and modification. They are at their zenith or close to it.
3. TOMORROW'S BREADWINNERS: Tomorrow's breadwinner is both sizable reality and promise. It already has a large demand and wide acceptance. Yet its main growth is still ahead. Their contribution to the organization is high and will be higher.
4. SPECIALS: There are three types 1) productive, 2) unnecessary, and 3) unjustified. They have limited and distinct demand. They should employ very limited or no resources and will contribute only if they are by-products of large volume programs.
5. INVESTMENT IN ADMINISTRATIVE EGO: This is the program that should be a success - but is not. So much has already been invested in them that no one will face reality about them. Everyone expects it to be a success tomorrow.
6. SLEEPERS: These programs or projects might do well if only they were given a chance. Instead they do not get the support and key resources their performance has already earned. They may or may not seem to be risky.

7. FAILURES: These announce themselves and will liquidate themselves.

We should, of course, invest our time and other resources in "Tomorrows Breadwinners". These are the future. There are also several rules to keep in mind:

1. Don't minimize risk - maximize opportunity
2. Starve problems - feed opportunity.
3. Delegate yesterday - concentrate on tomorrow.
4. Don't put one half of a man on a job.
5. Don't split people with concern for today and concern for tomorrow.
6. Use tested - proven veterans on tommorrow.
7. Don't postpone tomorrow.
8. Run with success.

Setting a posteriority is also very difficult. Every posteriority is someone else's top priority. It is too easy to generate a list of top priorities and dividing yourself among them. This of course makes everyone happy, but unfortunately nothing whatever gets done.

Intelligence has little to do with the selection of priorities and the identification of posteriorities. Courage and stick-to-it-tiveness really solve the problems and creates the opportunities.

In closing, here are a few rules, created by Peter Drucker, for identifying priorities:

1. Pick the future as against the past.
2. Focus on opportunity rather than on the problem.
3. Choose your own direction - rather than climb on the bandwagon.
4. Aim high, aim for something that will make a difference, rather than for something that is "safe" and easy to do.

LEADING GROUPS:
A CHANGE IMPLEMENTATION STRATEGY

Mr. Ray Hansen

Phases of Group Interaction[1]

As an educational administrator, much of your work is done in meetings. Any group meeting, regardless of size, goes through three distinct phases as it progresses toward accomplishment of its objective. In observing group action, the phases are as clear cut as the change noticed when a car shifts gears. These three phases may be labeled:

CLARIFICATION

EVALUATION

DECISION

Although the phases of group action may be messed up and shifted back and forth (downshifted) by unskilled group leadership, the process can't be stopped any more than you can push toothpaste back into the tube. Any decision-making group will engage in interaction typical of all three phases.

As a group member, knowledge of this process will help you to use techniques appropriate to each phase. If there is a common mistake, it is rushing into the evaluation and decision phases.

For a group to operate effectively, it must spend at least 50% of its time in the CLARIFICATION phase. If appropriate leadership is used

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[1]R. F. Bales, "The Bales System (group dynamics)", Organizational Behavior (Homewood, IL: Richard D. Irwin, Inc., 1969), pp. 213-19.

here, the EVALUATION and DECISION phases will follow automatically and take care of themselves. If the CLARIFICATION phase is rushed, or inappropriately led, decisions may never be made, meetings become endless arguments, are characterized by apathy, or decisions made are often recinded, ignored, and second guessed. If the CLARIFICATION phase is handled correctly, the group will be "healthy". A healthy group is defined as one in which:

1. The job gets done.
2. The people enjoy the activity.

With this in mind, an analysis of the CLARIFICATION phase is in order.

Leadership Roles in Groups

Two things must occur during the CLARIFICATION phase:

1. The group's goal or objective is clearly laid out.
2. The roles to be played by each individual group member are tried out, and when accepted by others, are stabilized.

This phase starts as a period of uncertainty as to what the parts are, a period when necessary assumptions are made, and a definition of the situation is created. As facts and opinions concerning the situation are presented, leadership roles begin to emerge in the group. The most obvious role is the individual who talks the most, or has the most ideas to contribute toward solving the problem. This person is termed the "task leader". In a group composed of people who have worked together frequently in the past, a task leader will generally exist due to past relationships. This is often the person with position power in the group, but it does not have to be. In groups composed of people who haven't worked together previously, the group will

instinctively look for a task leader. People automatically look to the oldest person in the group; the one female in an all male group; the only male in an all female group; the biggest person; the person with red hair; or the individual in the group who dresses unusually. The person that the group is drawn to initially thus has an advantage if he desires to assume the task leader role. However, if that person drops the ball at the start, the group will reject his leadership immediately. In addition, he will seldom be given a second chance to lead and may also find that his status in the group is near the bottom of the pecking order. Once the task leader role has stabilized, it becomes evident in two ways. First, when the task leader talks, everyone else shuts up and listens. Second, when other group members talk, they will lock in eye contact with the task leader. When the task leader talks, he will shift his eye contact from person to person. Task leaders typically monopolize from 30-70% of the talking time in a group. However, once a leader begins to dominate 60-70% of the time, he will experience resentment directed at him by the group members. Autocratic or dictatorial task leaders frequently choose a "scapegoat" to syphon off some of the group member's antagonism. For example, military leaders can use the enemy; football coaches use the opposing team; Hitler used the Jewish race.

A second role to emerge in groups is that of the "guidance leader". This is the person who "keeps the train on the tracks". When the group discussion strays off the topic, he will redirect them toward their original objective. He seldom fights for a point, but will be found rephrasing the points others make to add his emphasis. His approach is

frequently, "In other words, John, you're saying that....." A guidance leader can be spotted in several ways:

1. He keeps the group focused on their objective.
2. He will be the first person to learn the names of all group members, and he will repeatedly use them.
3. He will rephrase others' statements.
4. He is the only person who can interrupt the task leader and get by with it. The task leader will stop talking and listen to him.
5. He will often take notes, or serve as the group's secretary.
6. When he speaks, he will not lock in eye contact on the task leader, but will shift eye contact to all group members.

In effect, the guidance leader role is the most difficult and influential role in the group. An outsider to the group will readily recognize the task leader. Task leaders receive much of the glory for the group's output. The guidance leader is not after glory. He needs less ego feedback than the task leader. His concern is accomplishment of the group's objective. His techniques focus on accomplishing that objective through developing the people in the group. He first attempts to spot the task leader and support him through rephrasing his points. Through providing this ego building to the task leader, he assures that he will be able to interrupt or control the task leader should it become necessary. He himself does not want the task leader role, as the task leader ends up doing much of the group's outside leg work. Often, the guidance leader is the person in the group with the most formal position power in the organization. If he

were to assume the task leader role, he would end up doing the jobs of his subordinates. Once the task leader is under his control, he will progressively reinforce other group members' points. He will draw the more introverted members of the group into the process by asking their opinions.

Due to his position power and control of the task leader, the guidance leader will often find other group members locking eye contact on him as they talk. If he allows this to continue, he will be task leader. To avoid this, he will take many notes. This gives him an excuse to avoid eye contact with group members as they talk. Members will then shift eye contact back to the task leader. It's kind of interesting to watch what happens to the pages and pages of guidance leader's notes after a meeting. He may not even wait to get to his office to discard them after the meeting, but will deposit them in the wastebasket by the door of the meeting room. On the other hand, if the group must meet again to accomplish its task, the guidance leader will retain his notes to start the next meeting with a summary of what was accomplished previously.

A third leader role to emerge in the group is that of "Human Relations Leader". As groups work on problems, they frequently reject and criticize members' ideas. The H. R. leader is the person who eases the tension with jokes and bandages up the hurt feelings of members whose ideas are rejected. Thus, the H. R. leader oils the group's machinery. If we were to look at a group's structure as a family, the guidance leader would be the father, task leader would be the eldest son, and H. R. leader would be the mother. Groups in which all three roles emerge are very stable, get the job done, and members enjoy being a part of the group.

Group Size

A single thing like group size can engineer success or failure of a group. I'm sure that you have participated in groups which dissolved due to apathy or split apart from conflict.

Yet, group size can contribute positively toward accomplishment of group goals. Working groups from 5 - 8 members are most effective. Groups with less than 5 members may find themselves with no one who desires to be task leader. Nothing will be accomplished!

Even if a task leader is evident, the guidance and H. R. roles will frequently be unfilled resulting in a group which may hold together for a one-shot job, but will not remain together. Groups from 5 - 8 persons will always have a task leader, based on normal probability. Groups over 8 persons, if they are all one sex, will frequently have 2 people who aspire to be task leaders. These two individuals will go at each other's throats like two bull elk during mating season until one of them dominates the other and thus stakes out the group as his "territory". The end result can go one of two ways:

1. The task leader who was beaten will withdraw (psychologically at least) from the group.
2. The two task leaders will each take their own followers and split the group.

Groups with too many members spend an undue amount of time in the clarification phase. Just as the group seems to have all facts laid out and a stable establishment of roles, another group member will bring up a totally new viewpoint, and restart the clarification phase all over.

Evaluation & Decision Phases

Evaluation & Decision phases of interaction in groups are nearly automatic. During evaluation, the group works with the facts as summarized and sorts them into alternative methods of solving the problem. Finally, in the decision phase, the members select an alternative and decide upon the details of implementation.

A frequent problem noted with inexperienced task leaders is that of assuming that every group member has done their homework and is prepared to evaluate facts. Thus, they attempt to enter evaluation with little or no clarification phase.

Control of Group Output

If a leader can control the group until the start of the evaluation phase, he can control the output. The guidance leader and task leader are the ones with the most influence. Assuming the group is nearing the end of clarification and the facts brought out imply that the group is leaning toward a decision that you (as task leader or guidance leader) don't agree with, there are two ways in which you can stop the inevitable decision. One is to change your role. Shift from guidance to task leader, or drop out as task leader. The second is to bring more different facts into the group. Any change in roles or factual input places the group right back into the middle of the clarification phase.

Types of Interaction Between People

In observing two person's interactions, small group interactions, or the operation of entire organizations, there are four major types of

interactions which may be noted. Figure #1 summarizes these four types and provides some sub-examples of each type.

The (+) Task and (+) H. R. interaction are most important. While walking through an organization, I get worried if I see 100% (+) task activity with people slaving over their jobs. People don't work like that! If they are, they are trying to fake you out. On the other hand, if workers are all laughing, joking, and taking coffee breaks there is something wrong, too. The work is not getting done. For an organization to be healthy it must get the job done, and the personnel must enjoy the people they are working with. Healthy organizations show 50-60% (+) task related interaction. That is, either people are actively engaged in doing the job or they are discussing ways in which the job problems can be solved. Repetitive jobs may show somewhat higher (+) task activity. Secondly, in the healthy organization, people will show as much as 25% (+) H. R. interaction while working. With the exception of repetitive work, this (+) H. R. percentage will seldom be higher. For example if there is not enough work for the number of people in the organization to do, (overstaffing) both (+) task and (+) H. R. activity will go <u>down</u>. Instead of an increase in (+) H. R., the organization will notice increases in complaints about material, tooling, and working conditions. Grievances will increase and so will interpersonal conflicts between workers. The only time (+) H. R. goes much above 25% is in a social organization or in repetitive work situations. In social situations the (+) H. R. may actually be looked upon as the (+) task function of the group. In repetitive work situations (which often are desired

FIGURE #1 - TYPES OF GROUP INTERACTION

+ H. R. 25+%	1. Shows Solidarity - raises other's status, gives help 2. Shows Tension Release - jokes, laughs 3. Agrees - shows passive acceptance, concurs
+ TASK 50-60%	4. Gives Suggestion - direction implying autonomy for others 5. Gives Opinion - evaluation, analysis, expresses feeling 6. Gives Orientation - information, repeats, clarifies, confirms
- TASK 5%	7. Asks Orientation - information, repetition, confirmation 8. Asks Opinion - evaluation, analysis, expression of feeling 9. Asks For Suggestion - direction, possible ways of action
- H. R. 10%	10. Disagrees - shows passive rejection, formality 11. Shows Tension - asks for help, withdraws out of field 12. Shows Antagonism - deflates other's status, asserts self

by affiliation motivated people) the worker doesn't need to concentrate on the job, even though a much greater percent of physical time is spent in (+) task activity. The worker's mind is actually free to engage in social discussion with workers around him.

Negative task interactions are of two basic types. The first type is typical of the person who gets nervous as a nudist climbing through a barbed wire fence each time a new idea is brought up. He thinks only of all the reasons why it can't be done. Every organization has several of this type of negative thinker. In a work group, he is a thorn in the side but is seldom a serious problem. His negativistic attitude is well known to the other personnel and is automatically discounted. The second kind of (-) task activity is one which must be dealt with. These are legitimate criticisms of ideas and or proposals for changes in methods. Basically, this is the kind of healthy disagreement necessary in organizations which are growing and changing. The more dynamic and varied the projects worked on, the higher the (-) task proportion of the interaction. However, if (-) task interaction gets as high as 10-15%, it is because of a conflict over the task leader role in the group. The group will have to split or one of the task leader combatants will have to be put down (psychologically castrated) to resolve the problem. Care must be exercised in this process. The guidance leader or one of the task leaders can put down the other task leader only after the other group members signal non-verbally that they are against that person's ideas and wish that he would shut up. In other words, he must be given enough rope to hang himself.

The fourth type of group interaction is (-) H. R. The most obviously recognized (-) H. R. is the aggressive type of negative put down of another person. (Category #12 from Figure #1) However, this is the least often used (-) H. R. Category #11 is the first item to look for in terms of a person rejecting the group. The individual who daydreams, doodles on a pad, avoids eye contact or verbal contact with the foreman, or takes his coffee break alone is non-verbally rejecting the work group. He will next begin coming to meetings or work late, be absent, and eventually quit.

From a leadership standpoint, this type of non-verbal (-) H. R. should be recognized as a symptom of a problem with that group member. The leader should confront the behavior directly. For example, a statement like, "Joe, something seems to be troubling you about this project. What are your feelings concerning it?" In many cases, this will get all of the cards out on the table so that the issues can be dealt with.

In summary, communications with groups can provide a foundation for analyzing both small group and two person interactions. The same phases and types of interaction that occur in groups occur between two persons. Some leadership tips for dealing with these situations are summarized in Table #1.

TABLE #1 - TIPS FOR LEADING GROUPS

1. Keep group size between 5-8 persons.
2. Focus on the "Clarification" phase and don't attempt "Evaluation & Decision" phases prematurely. All facts must be out and all participants must have their roles stabilized.
3. Assume "Guidance Leader" role unless:
    a. You are a person who must or wants to implement the group's ideas.
    b. No task leader emerges.

    Then, assume task leader role.
4. As Guidance Leader:
    a. Spot task leader first and support his ideas by reflecting them.
    b. Learn and use all group members' names when addressing them. This is strong (+) H. R. feedback to people.
    c. Don't allow task leader or group members to lock in eye contact on you. Use note taking, pipe lighting, etc. to avoid eye contact.
    d. Continually focus discussion on the objectives that the group is working on. Focus meeting on objective at the start, and redirect conversation when anyone strays too far off the subject.
5. As Task Leader:
    a. Have a gimmick to look different if there is nothing in your normal appearance to make you stand out.
    b. Talk a great deal--at least 25-30% of the time. Make sure, however, that you have done your homework prior to the meeting and have quality as well as quantity to contribute.

c. Use your eye contact. Look all group members in the eye as you talk and shift contact back and forth.

d. If a task leader conflict occurs, don't back off, lock horns. If the other person is off the wall, wait until the group gives you non-verbal permission to dispense with him. They must reject him before you can.

6. As a Task or Guidance Leader, use a very heavy proportion of (+) task. You can use some (-) task during conflict, but otherwise avoid it. Secondly, you should use (+) H. R. but a great deal less than the H. R. leader. Don't use any (-) H. R.!

POWER AND PEOPLE

Dr. Jerry Coomer

Power can be defined as the ability to influence persons to do something they may or may not have done otherwise. It is a latent phenomena. When power is applied and put into action it can then properly be called leadership. If these preceding definitions are valid then it follows that leaders need power.

A small problem here is that the word power usually generates two different initial reactions. The first reaction is negative, self-serving, abusive actions which inspire revolt from those on the receiving end. The other face of power is the less obvious, but more effective use of power which causes organizational objectives to be achieved. In describing a successful power person (the other face of power we just alluded to), David McClelland from Harvard says that this person:

(A) believes in the authority system. The leader is in charge and after a decision is made, the best action for everyone concerned is to try to make it work.

(B) believes in fairness and organizational justice. Power is to be used for, not against, those in the organization.

(C) will sacrifice his or her own self interest in order to benefit the organization (often in an obvious way for all to see).

All of these attributes describe an effective power person. These attributes could all be classified into the "identification" category of power. Identification power, according to French & Raven's model of power, is derived from subordinates', peers', and supervisors' acceptance of us as a reference person. This acceptance is actually caused by our own

beliefs and behavior. In its most potent extreme, identification power could be called charismatic ability. Neither Mahatma Ghandi or Martin Luther King held powerful formal authority positions but certainly could strongly influence great numbers of followers and non-followers. Any currently popular musical group may at a given moment exercise tremendous identification power over many people in this country. Someone meeting with his or her peers in a business, government, or educational setting may be able to exercise more influence than someone else simply because people want to believe in his or her ideas.

"Expert" power is based on the authority of knowledge. Physicians and lawyers, for example, have a great deal of expert power. Within an organization, people with expert power can yield a great deal of influence; in a meeting with his or her peers and those higher in the hierarchy, the computer expert may in fact have the greatest amount of power simply because there is no one else with sufficient knowledge of the computer's operation and potential. Similarly, because of expert knowledge, the market research analyst carries a great deal of influence in determining the future direction of the organization.

Identification and expert power are both forms of personal power. That is they are generated, developed and transported by the individual. What kind of power comes with the job? We know a generous helping of power can be supplied with a particular job so how can we label these kinds of power?

"Legitimate", or position, power derives from either the culture or the organization, but only if the organization is accepted as legitimate. This is especially true in organizations having a hierarchy of authority; those

at lower levels in the hierarchy accept the power and influence of those higher in the organization. For example, a judge has the "right" to levy fines; the Congress has the "right" to pass laws; the president of an organization has the "right" to make certain management decisions. In a formal organization, legitimate power is exerted primarily between positions or "offices" rather than between individuals.

However, legitimate power depends on the individual's acceptance of the organization or culture and the person exerting the influence (shades of identification power). For example, during Prohibition there was widespread violation of the laws because people did not accept the laws as legitimate. Today, many people disregard the laws about the use of marijuana for similar reasons. The result of widespread rejection of legitimate power is to severely reduce the power potential of the authority figure.

A second form of power inherent with the job is "reward" or sanction power. This type of power is based on the leader's ability to reward a follower and in some situations may be closely linked to identification power. In an industrial organization, reward power is closely linked to the manager's legitimate power in awarding pay increases or promotions. In a peer group it may be the leader's power to admit a new member. The nature of work-flow relationships is such that an individual manager may have a great deal of reward power simply by his place in the work flow, e.g., a purchasing agent can "reward" a cooperative manager by expediting his orders, or a maintenance manager may "reward" another manager by giving his requests higher priority.

Other forms of reward could be purely subjective such as praise and recognition. This can be a potent power tool since great efforts are made by some individuals just for recognition from their immediate superior.

The final and fifth kind of power, the opposite of reward power, is called "coercive" power. This in plain terms is the power to deny something that someone wants or do something to them they do not wish to happen. In its most obvious form it is the power to punish, whether by firing a person for insubordination or arresting someone for violating a law. Yet coercive power is not necessarily absolute--the individual may choose to quit or enter a new profession or plead his or her case before a higher court.

Coercive power in its routine use is far more subtle than these examples. It is silence in a situation where a person is expecting and desiring praise. It is assignments to undesirable working hours or to unwanted and uninteresting tasks. It is not seeking a person's input or ignoring their input when given.

These five types of power are interrelated and indeed may rest with the same person. Since this interrelationship does exist, the use (or misuse) of one kind of power affects the exercise of the other types of power. For example, a person's use of coercive power may reduce identification power. Conversely, extensive use of reward power will, over time, increase identification power.

All five of these power bases are important to one in a leadership position. They are not equally important in all situations but some

generalizations can still be made. The power base that keeps the organization going each day and routinely "carries the mail" is legitimate power. This one still seems to have the most potency in most situations. Its potency is severely reduced if not accompanied by the other two job oriented power bases (reward and coercive). An example of this situation would be chairman of a committee or head of a task force. Often in these types of assignments legitimate power is granted to the holder of the position, but no reward power and no coercive power. The accomplishments of ad hoc committees often bear witness to this lack of accompanying power given to the leader. Committee results usually are slightly higher in quality because of the number of minds involved and usually slightly higher in quantity because of the number of hands involved. These increases however are often not large enough to justify the number of people involved. One person probably did almost all of the work (the committee chairperson) while the others collectively contributed to a small improvement in quality and quantity. Output could possibly be significantly improved if committee leadership carried reward and coercive powers.

Identification power is often the least effective form of power. Unless a person has this power to its highest extreme (charisma) it is not likely we will be influenced to a great degree by this form of power alone. We all know persons we like and relate to in our organizations but unless they have other forms of power it is unlikely we will do anything different than we would have done otherwise.

Using this power model we can provide the answers to some well worn questions. It could be labeled the "Tired Old Questions" (TOQ) Quiz. The "TOQ" Quiz goes like this:

I. Question: Is it important for a leader to be liked by those being led?

Answer: This response requires a three step extension of logic which begins with the definition of leadership being, (a) The active application of power. If there is no power (latent ability to influence) there can be no leadership. (b) All five power bases are important albeit not equally so. (c) Identification power by definition is being liked and accepted by subordinates, peers, and superiors. Therefore the answer is yes it is important. Identification power is the weakest of the five power bases and so we could be effective without it but our tasks may be somewhat more difficult to accomplish.

II. Question: Is it important to have specific content knowledge of the area in which you are trying to lead?

Answer: This is somewhat like saying do you have to know how to wait on tables before you could be head waiter. It is usually not mandatory to know how to weld in order to effectively supervise the welding section of the factory. Subordinates will forgive a lack of specific knowledge in their leader for an initial time period. Eventually they expect their leadership to know more and more detail about the jobs subordinates are doing. Job knowledge is an obvious form of expert power. All power bases are important. Yes, it is important to gain content job knowledge in the areas you are trying to lead.

III. Question: Are leaders made or born? (I warned you these were tired old questions).

Answer: Three of the power bases, legitimate, reward and coercive are usually granted with the job. These potent forces in providing the influences to lead are granted to whomever holds the job title. Leaders are made! The other two power bases identification and expert can only be generated by the individual. The person has to obtain necessary knowledge and has to develop the type of personality or behavior which will allow a certain amount of acceptance by subordinates: Leaders are born! Head for the roundhouse, Nellie, he can't corner you there! We can't be cornered on this question either. The answer is both. If an individual only has the personal types of power there is not much chance of effective leadership. If an individual only has job related powers results are also likely to be very limited.

Any discussion of power should include some time to deal with issues which affect power. Power is not static, it is dynamic. The job and personal power of any position or person changes constantly. For the sake of convenience from this point on in the paper no distinction shall be made between job power and personal power. The term "power" will be used to include both.

Power is affected by the degree of involvement in issues. The more important or controversial the issue the more impact on power. If an individual is involved in low priority and non-controversial issues there is little chance of increasing power. If this person is involved in a very critical, and high priority issue, but no powerful people are involved, the individual is

wasting his or her effort. Changes on issues are only accomplished if power persons become involved.

What makes an issue important? When several power people become involved in an issue that automatically makes the issue important. Real issues are opened and created by power people. Other issues, felt to be important by unpowerful people, will not become real issues until power people become actively engaged in the process. It is worthy to note that of these three items about issues:

A. Who is involved.

B. How they are involved.

C. What the issue is.

The last item is least important.

If there is a desire to increase individual power the person must become involved in real issues with other power people. This involvement will usually increase power even if the involvement is in opposition. Examples of this can be seen in political candidates for office. Most of the people who run for high office become household names and even if they lose, their views on issues carry a good amount more impact than they would have before running for that office.

People already having power or wanting to increase it will decide to participate in issues if (a) they think they can make a contribution or (b) there are adequate rewards associated with winning in the issue or (c) the chances of any losses are small. Power people know that participation in power issues usually will provide some form of conflict.

If conflict is initiated and at least two adversaries follow the conflict through to its conclusion there seems to be three distinct stages which are accomplished. The first and initial stage of conflict is:

Stage I. Amusement of enjoyment of the contest. An individual joins the conflict because there is more to gain than there is to lose.

Stage II. At this point the conflict becomes more serious. The person may decide to drop out because the fun is over and he or she wants to (a) minimize losses. The other side of this stage is to decide to stay in the conflict to (b) save face.

Stage III. All attempts to get anything productive accomplished are abandoned at this stage. There is no hope to gain or any chance to save face. The only objective and reason for staying in conflict is to punish the opponent.

So that's the name of that tune! Power is a vital force for influencing behavior. We have new models for examining power with the hope this will increase our understanding so that with any luck at all we can improve our exercise of it.

If we want to lead we should understand power. One of the best known experts on power was born about 500 years ago. Machiavelli wrote in "The Prince" that a prince should reward (remember reward power?) followers freely. He made the point that after all it's the state's (company's) money not the prince's. He said this should be done in person by the prince. Let all those subordinates see who provides these things. He also advised rewarding in small increments and more often.

About punishing (remember coercive power?), Machiavelli suggested it should be done very emphatically. Have it done by lieutenants and do it quickly in one action. Machiavelli also strongly advised a prince (leader) to be loved (remember identification power?).

It is well to remember the often repeated theme of this paper which is there can be no influence without power. Our best witness to this is the pitiful Shakespearean King Lear who gave away all his land, money, soliders, and title to his children. Unhappily, he found himself no longer able to protect himself and also unable to influence anyone else, even his children, to do it for him.

ISSUE TOPIC PRESENTATIONS

PRINCIPLES OF EFFECTIVE LEADERSHIP FOR VOCATIONAL YOUTH ORGANIZATIONS

Mr. Larry W. Johnson
Mr. Charles B. Dygert

The following summary is a brief capsulization of a presentation designed to achieve a basic understanding in two major areas:

1. The necessary (teacher) leadership attitude and posture to successfully bring leadership to students.
2. Integration of leadership materials into the teaching curriculum to achieve the goals of the Vocational Youth Organization.

A Successful Leadership Posture

Some teachers are successful in providing leadership experiences for students--some obviously are not! What differences exist between an individual who can provide these experiences and those who elect to avoid "leadership experience planning" in the classroom? Certainly specific differences do exist; however, the primary difference is a "leadership attitude". In this context a "leadership attitude" can be defined as an attitude that leadership experiences are a necessary part of the teaching process. Many instructors simply do not see the "need" and/or "value" of leadership to the instructional process. Based on this understanding it is important, therefore, to identify psychological processes that need to be internalized by the instructor to adequately be prepared for a leadership role in the classroom.

The foundation of all (or at least most) human behavior is the extent to how one values themself--one's self-esteem. Similarly one's

self-esteem is an outgrowth of one's self-concept. Based on this premise, a teacher's decision to provide leadership experiences is probably based on his/her self-concept.

Psychologically all humans have some form of insecurities. Certainly this is a flexible condition--some individuals have more insecurities than others. In the same vein, an individual with low value of self would not normally exhibit leadership in their everyday lives. Every social order and occupational or career environment have their share of individuals with low or insecure self-concepts. In many cases these low self-esteem individuals have a detrimental effect on the organization or social order in which they function. Ironically, many individuals with questionable or low self-esteem are not aware of their problem. Likewise, people in positions where their principle role is management and/or motivation find themselves ineffective in this area. Often this brings about the development of defense mechanisms, or excuses for their seemingly inability to lead others.

Teachers, also, attempt to lead. Teaching is a leadership effort. When some feel their ability to teach, lead, inspire, etc. is ineffectual, they too build defense mechanisms and excuses to satisfy (for themselves) and deal with situations they find frustrating. As indicated, the inability to lead, inspire, etc. is based on a person's value of self. Critically, in the education milieu the teacher's self-esteem, not only controls his/her ability to lead and teach, but the measured self-concept of a teacher is a predictor of the probable self-concept levels of the students after a period of exposure to the teacher.

Therefore, the self-concept of a teacher not only has an impact on the effectiveness of his/her instruction, but also has an impact on the self-concept of the student. Based on these theories, strategies to raise or improve the self-esteem of instructors would seem to be a priority issue.

Likewise, if the self-concept of a teacher is "inconsistent" with an attitude that would value leadership and personal growth as good sound teaching goals, then certainly that individual would reject the concept of having a vocational youth club (VICA) as a class activity. Giving and teaching leadership activities in the classroom is probably beyond the self-conceived competency of a low self-esteem teacher.

If the self-concept of an individual controls or dictates human behavior, the self-concept would naturally have a bearing on an individual's ability to exhibit (effectively) other leadership principles. One's ability to maintain an enthusiastic positive attitude is an outgrowth of their value of self. Low self-esteem persons find it very easy to maintain negative attitudes and dwell in depressive habits. These same individuals would find it very difficult to engage in the activities of a vocational youth organization (VICA) as a participant or leader (advisor).

Effective motivated leadership in most areas depends on a highly positive attitude. An attitude that causes an individual to demonstrate a spirit that shouts, "Let me at it!!". This attitude, too, is transmitted by action. The teacher with a highly positive attitude creates students who are also positively motivated.

Associated with a leadership profile of an individual who would be expected to be successful as a vocational youth organization leader (advisor), is the understanding of youth (students). The successful teacher understands the problems of youth (students) and truly has empathy for the students of his/her program. The development of a meaningful activity that relates to students must be founded on carefully explored ideas and activities.

The instructor must understand that students (like all individuals) are motivated by feelings and needs related to their own value of self. Student identity thrusts (movement towards environments and activities that the individual wishes to identify with) are generated by personal feelings of worth. Most students experience identity crises in attempting to assert themselves as meaningful, functional human beings; even the term "student" places them in structured stereotyped identities. The knowledgeable instructor realizes the importance of the vocational youth organization as a student vehicle to achieve meaningful identity as fully functional individuals. Students who achieve an identity and association that fulfills a personal need are often found to be more successful in most other aspirations or goals. Similarly, students with positively developed self-concepts and association with meaningful identities seem to be superior in educational interest and achievement.

Integrating Leadership Activities Into the Vocational Curriculum

Activities and programs suggested for curriculum improvement are usually selected because of research and information that tend to support the premise that these activities and programs "are" beneficial. Most additions or alterations to teaching curriculums are also based on expected

goals and outcomes. However, while most educators agree that vocational youth organizations have a definite and significant place in the educational effort, few can specify goals or specific expected outcomes. Often, if outcomes are identified, they are listed in generalities that are too difficult or ambiguous to evaluate.

If educational activities should be developed, based on a capability to measure or accurately evaluate, then the events and programs of the vocational youth activities should also be goal oriented. Since the early developments of the vocational youth activity (VICA) educators have wrestled with this issue. Yet, the current suggested activities already have "built-in" evaluation devices that allow relatively accurate evaluation.

The outstanding club activity, listed as a competitive event in the VICA United States Skill Olympics, recommends a thirteen-point program designed to generate club and chapter level activities. Many local clubs and chapters, however, erroneously determine that the only reason to engage and participate in such an event is to enter competition.

The outstanding club and (the safety program) were originally developed to provide a working plan to engage students in a structured chapter or club level activity. Whether the document is entered as a competitive activity or not is insignificant. The importance of the activity is two-fold:

1. These activities are structured and chronologically organized to keep the activity within the time guidelines for implementation of the various club or chapter activities and events, and

2. These activities have built-in evaluation steps to determine the effectiveness of the over-all club program. For example:

A club or chapter who has not implemented an initiation ceremony for new members by April or May of the school year, (Section IV of the Outstanding Club Event in the VICA U.S. Skill Olympics Regulations) could not be rated as a program that has achieved the basic programs and events of a VICA activity. Similarly, a local VICA club who has not implemented the "local club committee organization and activity" step of the safety program (the first step in the development of the safety program) by March certainly would not succeed in the over-all safety effort. The outstanding club and safety program are goal-oriented and each step is measurable to determine and evaluate progress toward the independent goal of each program.

The trade and industrial instructor who chooses to integrate the outstanding club program and the safety program into their curriculums will be initiating a valuable method to accomplish significant organizational (VICA) objectives. In a similar manner, the instructor must also develop processes to insure individual student growth and achievement. This process can assist the instructor in setting inter-curriculum goals to attain a spirit of student achievement.

The club initiative and career achievement (referred to as the achievement program) is a structured goal-oriented student personal growth activity. This program can be easily adapted to a class curriculum achieve student planning and goal setting towards a selected goal. (The

program is structured into leadership and industrial degree ranks or steps.) The program also provides a definite evaluation process to independently identify progress toward a particular student goal within the program. For example:

> A student who has determined that within a school year he/she will achieve the "leader rank" in the leader degree area and the "specialist rank" in the industrial degree area would have to be achieving at specific levels in the lower ranks to be capable of achieving the ranks selected. Evaluation of a student's progress becomes a relatively simple process by setting time-tables for each degree rank selected.

The outstanding club, safety and career achievement programs of the VICA Organization are all goal-oriented processes that tend to formalize the affective (student personal growth and understanding) education of a Trade and Industrial or Health Occupation student. A Trade and Industrial program utilizing these programs and setting student and class goals for achievement and accomplishment will provide new depths and range to the educational effort. The VICA activities and programs are setting new horizons and prestige for the graduates of Trade and Industrial Education.

KEY TO SUCCESS: EVALUATION

Dr. Franklin J. King

The key to success through the utilization of evaluation techniques is based on the premise that the evaluation process ferrets out strong and weak characteristics. The decision-makers may select the characteristics which are accomplishing the predetermined goals of a given mission. Through a continous evaluation process only maximum contributing characteristics are retained. Thus, evaluation serves as a key to successful program offerings.

To evaluate, the evaluator must have a procedure. An evaluation procedure must be manageable and comprehensive. A model for an evaluation procedure which has been developed and revised on a continuous basis since 1970 will be presented. The title of the model is "A Model to Manage and Evaluate a Career Oriented Educational System". (See next page).

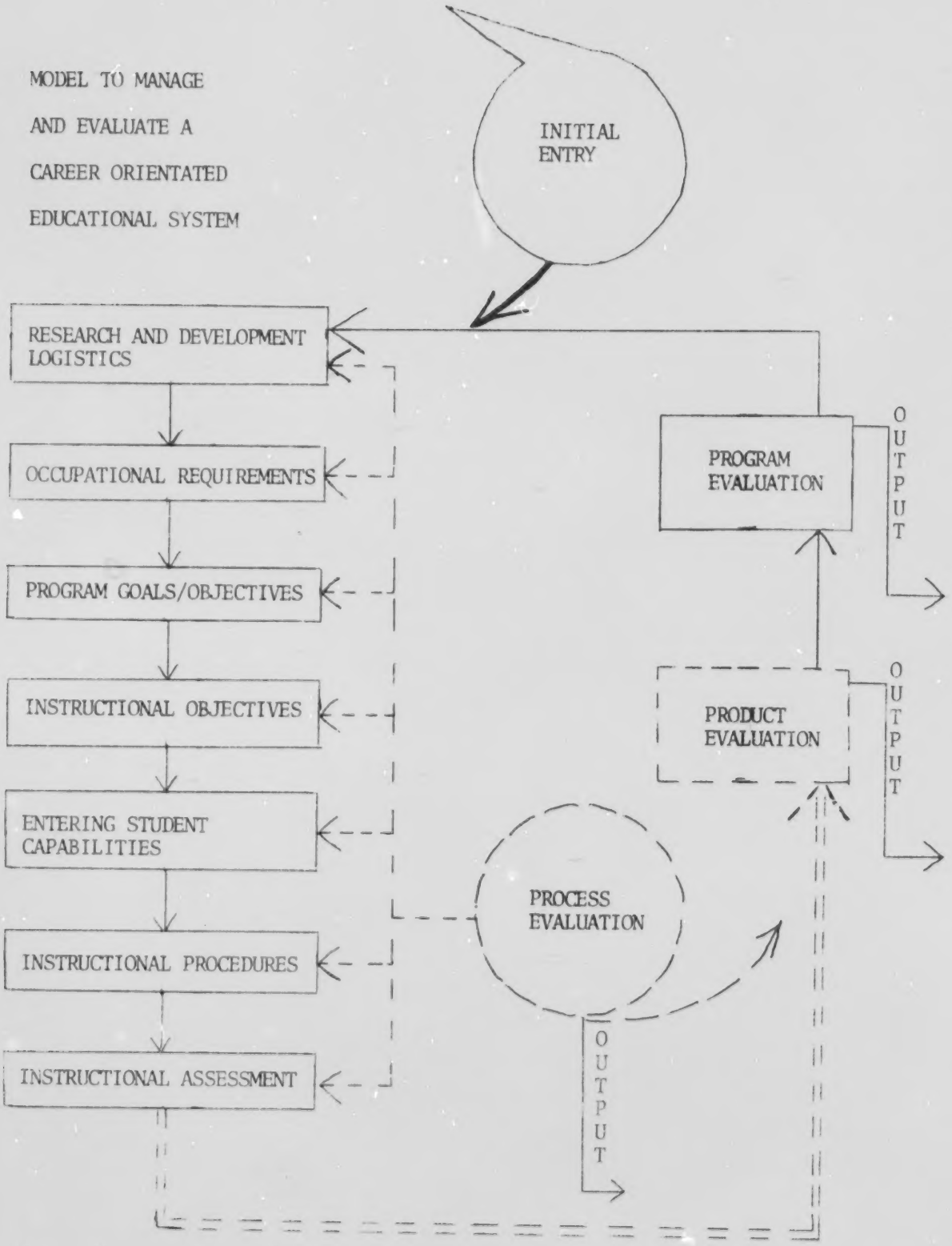
Rationale for Each Component of the Model

To comprehend the model, a brief description of the rationale of each component is necessary.

Initial Entry of the Model. Obviously, evaluation of something cannot be accomplished until a process is completed or managed. Therefore, provision for the initial entry to the model should be made and inferred that a career orientated educational system can be managed and then evaluated to see how well the predetermined objectives were reached.

Research and Development Logistics. Next in the model is the research and logistics component needed to provide data about the program which

MODEL TO MANAGE
AND EVALUATE A
CAREER ORIENTATED
EDUCATIONAL SYSTEM



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needs improvement or initiation. Development logistics refers to the activities connected with establishing, operating, and maintaining the educational system. Items such as materials, personnel, transportation, utilities, and other economic considerations are part of this component.

Occupational Requirements. This component of the model has a two-fold meaning. First, it refers to the availability of jobs in the work force for which training is offered. Secondly, it refers to the requirements for each job. All of the work force data revealed by the activities connected with the research and development component may be used in developing this component also. Census data, advisory committee input as well as job descriptions, job analysis, and occupational analysis are among the items belonging to an analysis of this component.

Program Goals/Objectives. In this component, program goals/objectives, may be the objectives of the vocational department in a comprehensive high school or they may be the objectives of a junior college department of technical education or as a concluding example, they may be the objectives for any educational undertaking. Program goals and objectives are a major part of this model, because without objectives, there is no foundation upon which to base an evaluation.

Instructional Objectives. Instructional objectives is the component which may be divided into two categories; course objectives and lesson objectives. Instructional objectives should define, in measurable and observable forms, those things the student is expected to attain during or because of the instructional process.

Entering Student Capabilities. This component includes those attributes which are crucial to the potential success in a given educational program. Such items as previous work experience, interest, attitude, aptitude and pretests may be considered. This list must be continued until the information needed to provide a complete student profile is obtained. It is vital to have these measures in order to design and evaluate the instruction, otherwise, the system may fail at this point.

Instructional Procedures. The instructional procedures are those things which relate to the management of learning opportunities such as strategies, methods, teacher-student interaction, student-student interaction as well as interaction between others concerned with the learning process.

Instructional Assessment. Instructional assessment in this model is concerned with the behavior change that has taken place presumably because of classroom instruction, and the competence level the student has attained according to the final measures upon completion of the instructional process. The assessment must be based upon pre-selected objectives.

Process Evaluation. The process evaluation component is the first of the three evaluation procedures illustrated in the model. Evaluation of the instructional process has input or feed-back features to all of the components even though the information for process evaluation is obtained primarily by evaluation of the instructional objectives, entering student capabilities, instructional procedures, and instructional assessments. Even though these are the four primary components to be evaluated

in the process evaluation, the data obtained has feed-back features, to program goals and objectives, to the occupational requirements, and to the research and development logistics. Also there is a major spin-off for data to feed into the other evaluation procedures which recycles through research and development logistics. When desired, process data may be reported out at this point, such as the assignment of grades.

Product Evaluation. This component is directly related to career performance. In the interest to improve instruction and to obtain data for accountability report, a knowledge of what the student has been doing since terminating his formal schooling, is needed. The student is the product of the instructional process, thus, product evaluation. The information obtained during the instructional process may be used for comparison with the data obtained from a product-type evaluation.

Program Evaluation. The scope of a program evaluation is always in terms of the objectives set for by that particular program evaluation project. A program evaluation may include all of the vocational offerings, or a selected sample thereof. It should be noted that a program evaluation or, for that matter, any other type of evaluation, is always directed by the objectives desired to be attained for a specific evaluation procedure.

Application of the Evaluation Model

The application of the evaluation model was presented through the evaluation procedures adopted by the Division of Career and Adult Education, Missouri Department of Elementary and Secondary Education.

The example contained the nine state goals and the instrumentation for evaluating goal number two. Those materials are as follows:

1. Provide integrated career education programs.
2. Maintain and expand instructional programs and services for increasing numbers of secondary students commensurate with labor market demands.
3. Maintain and expand instructional programs and services for persons who need postsecondary education commensurate with labor market demands.
4. Maintain and expand instructional programs and services for persons who need adult education commensurate with labor market demands.
5. Maintain and expand instructional occupational programs and services for disadvantaged and handicapped persons.
6. Provide a program of pre-service and in-service occupational education for professional personnel development.
7. Provide state and local leadership opportunities for the further development and continued growth of the Missouri Program of Career and Vocational Education.
8. Provide administrative, ancillary, and other supportive services to enhance the quality of vocational instructional program efforts.
9. Improve the quality of career and vocational programs through exemplary, research, and development programs, and related research activities.

Instrumentation for Evaluating Goal Number Two:

GOAL NO. 2

Maintain and expand instructional programs and services for increasing numbers of secondary students commensurate with labor market demands.

INSTITUTION GOAL

CRITERION QUESTION

To what extent does your school maintain and expand instructional programs and services for increasing numbers of secondary students commensurate with labor market demands?

Directions: Please check the most appropriate answer, complete forms when applicable, and provide other information requested. N/A means the question does not apply in your situation.

2.1 Using the following format, list all occupational programs for the past five years:

Year _____

Department	Program	Enrollment

2.2 Are the students from schools specified in the area school proposal participating in the area school programs? (Acceptable evidence: list programs and enrollments over last two years and a copy of the area school proposal) Yes___ No___ N/A___

Use the following format for organizing your data:

COOPERATING SCHOOLS (1974-75)	PROGRAMS					
	Enrollments by cooperating schools					
	B&O		Welding		Building Trades	
Fairfax	3	4	1	3	4	6
Friendly	7	9	2	4	7	2
TOTALS	10	13	3	7	11	8

2.3 What projected labor market data are available to justify program planning?

MOTIS	Yes___ No___ N/A___
Local Survey	Yes___ No___ N/A___
Chamber of Commerce	Yes___ No___ N/A___
Employment Security	Yes___ No___ N/A___
Other (Specify)	Yes___ No___ N/A___

Acceptable evidence: a copy of the report(s)

2.4 As a result of labor market data, what programs have been expanded, initiated, or phased out during the past three years? Acceptable evidence: list of programs using the format below.

Program	Date	Criteria	Disposition

2.5 Which of the following participate in the decision making process?

Administration	Yes___	No___	N/A___
Governing Board	Yes___	No___	N/A___
Faculty	Yes___	No___	N/A___
Advisory Committee	Yes___	No___	N/A___
Other (explain)	Yes___	No___	N/A___

2.6 Does the institution have student follow-up data on number of completions, attrition rate, reasons for dropping out or stopping out, and job placement?

Yes___ No___ N/A___

(Acceptable evidence: a copy of the report)

2.7 Is there a procedure for evaluating individual instructional programs?

Yes___ No___ N/A___

(Acceptable evidence: a copy of the plan, interview with department chairman, faculty, and advisory committee representatives)

2.8 What is the advisory committee structure at your school and how does the advisory committee influence curriculum committee decision?

(Acceptable evidence: a list of advisory committee members and who each represent, and a copy of the minutes)

2.9 Is there an operational budget for each program?

Yes___ No___ N/A___

(Acceptable evidence: a copy of the budget and an interview with appropriate staff members)

2.10 What services, other than those listed in Department of Elementary and Secondary Education Goal #8, are available for students. (Acceptable evidence: list of services using the format below)

Services	Objective	Target Group

2.11 Have the staff participated in self-evaluation of their respective programs or services? (Acceptable evidence: copy of marked evaluation instrument and interviews with selected staff members) Yes___ No___ N/A___

Summary

The initial issue of evaluation was reviewed. The instrumentation of the Missouri evaluation system was related to components of the evaluation model. Each participant was challenged to develop a system of evaluation for their state: a key to success.

PROFESSIONAL DEVELOPMENT & MANAGEMENT TRAINING
FOR TEACHING & ADMINISTRATIVE PERSONNEL

Dr. Charles O. Hopkins

Starting a Revolution

With this being a bicentennial year it seems appropriate to talk about starting a revolution. This can be done by utilizing a few critical techniques of management. Education has been a little slow in developing the techniques of management and their uses. Historically this has not been a problem, but presently there are more and more demands being placed on educators to do a better job of managing and utilizing the resources that are available to their respective organizations. This is not only true in education, but it seems to be a trend that has developed across all public agencies and organizations. Many times, however, we get so busy being busy that we really forget what we are hired to do. Almost everyone favors evaluation, but no one wants to be evaluated; one of the reasons is there has never been any predetermined criteria against which to evaluate persons in the educational system. This may have been brought about by the many styles of management that are being used today. One of these styles of management which will be discussed in this paper is Management by Deadline. Under this style of management everything is put off until it has to be done. Then you have to work like the devil to get it accomplished; slack off until another deadline approaches then work and get it accomplished, and so forth. The problem with management by deadline is that it leads to another problem which is even worse. This is called Management by Crisis. Management by Crisis is a style of management in which the individual spends very little time in planning and the less time he has for planning the more fires he has to put out; the more fires he has to put out, the less time for planning, so it perpetuates

itself from a lack of planning to crisis, after crisis, after crisis. A third style of management is Management by Exception. This is not a bad style of management and probably more closely represents the style of management that most people use today. Under Management by Exception there is a trend line that the employee is expected to follow. As long as he stays in the trend line everything is fine, but not being quite sure exactly what he is supposed to be doing, many times he may deviate from that trend line. At the point that he deviates the manager will step in and say, "Hey you're not supposed to be out there doing that, please come back on the trend line." The problem with this style of management is that a lot of time can be lost from the time the employee leaves the trend line until someone brings him back, if he ever gets back on it.

Another thing is that the employee is never quite sure just exactly what he is supposed to be doing, often resulting in loss of job. A negative feeling may be created because of the conflict in what the individual perceives that he is supposed to be doing and what the manager perceives that employee's function to be.

Each organization is unique and must have a management system that fits its uniqueness. It is necessary to utilize the input from the organization in order to design a management system that will be accepted by the personnel within the agency that are responsible for carrying out the function that the agency was created to perform. It is my opinion that each agency has all the necessary expertise that is required to solve its problems if it were able to manage this expertise. Leadership for an organization should flow from the top which provides direction for each level of management until it has penetrated to the last level within the organization. The key is to involve persons at all

levels in order to get their input and commitment. All of us are managers in our area of responsibility. We are decision makers no matter at what level we operate within the organization. The only things that we have to work with in the form of resources are: authority, people, and dollars. Whether we realize it or not, all of us in some form or another have objectives that we are trying to achieve. Objectives must be measured in quality, quantity, and time. Our job as decision maker is to allocate the resources to achieve the desired objectives. The resources must be proportional to the objectives and the objectives must be operational, useful, and measurable. As managers then, we are looking for a style of management with which we are comfortable. The basic ideas of a management system are these: (1) The better you understand what it is you are trying to accomplish, the greater your chances of accomplishing it, (2) Progress can only be measured in terms of what one is trying to make progress toward. A good management system basically has three parts: plan, implement, and review. The one that will take the most time is planning. Since a lot of time is allocated to planning, the system is front-end loaded. A large quantity of time is spent planning in the beginning but levels off as the plan is put into operation. Many times we suffer from the volcano effect. That is, problems are not handled until they erupt. Planning is the rational determination of where you are, where you want to go, and how you are going to get there. By graphically representing this, it is not much of a problem to identify any results that we want to measure. We go back and gather facts to determine where we've been in the past, we plot this to where we are at the present time, and then draw a line through this to represent where we would likely be in the future if everything was held constant.

What planning does for us, however, is to let us look realistically at where we want to go. The difficulty is from where we would have likely been in the future if we didn't change anything to where we'd realistically like to be in the future. And this is the planning gap and where all the strategies must be used. In planning we must recognize time. Many of us spend a great deal of time in the past. This is unfortunate because we are not able to change the past. Another time frome to be considered is the present. We cannot affect very much what is presently going on. But what we can have a great impact on is the future, so therefore we should keep in mind the FUTURE when we do the planning.

Let's go into a little greater detail about the actual operation of a management system. To begin with, the organization must define its purpose. From its purpose, a mission statement is developed. A mission statement is a prerequisite to a goal, which is usually derived from a mandate, and a mandate is set forth by law. Laws give us the source of funding used in the actual operation or carrying out of the organization's assigned responsibilities. After a mission statement has been made, the next step is to define the goals of the organization. Goals are defined as broad, general statements of intent, and are not quantifiable. The next step is to write objectives; objectives are quantifiable. They are short statements of intent and must be measurable. They should indicate what is to be accomplished and when. This all sounds easy, but it is not quite as easy as it looks. It is necessary to identify must and want objectives and weigh them accordingly. Many of us list the want objectives rather than the must objectives, because it is much easier for us to do the things that we want to do rather than the things we must do, and we must be careful to avoid this.

There are certain things in the organization that we must do. We should identify those as priorities and carry them out first. There is nothing wrong with want objectives but we must have the correct order of priority in carrying them out. Organizationally, then, what does a management system do? It no longer makes us responsible for the world. You are responsible for everything that you and your organizational unit does or fails to do.

Next, let's look at additional components of an organizational management system. Up to this point we have covered organizational objectives, which are one component of the total management system. Accomplishing this has caused the organization to plan, but yet the individuals within the organization still do not know what they are accountable for. So the second part of the system is called Work Performance Objectives, where individuals are responsible to certain job objectives that they must carry out to help the organization to accomplish its overall objectives.

At this time I would like to examine the work performance objective phase of a management system. First, it allows the individual to do some planning. In the planning process, the job functions of individuals are defined. The job objectives are derived, methods to achieve the job objectives are developed, and the evaluation scheme is designed. The term job function may be a new word to many of you. I am sure that all of you are familiar with job descriptions. I challenge you to go home and read your job descriptions and tell me exactly what you are responsible for.

Usually you find that job descriptions make you responsible for the universe and you still don't know specifically what you were hired to do.

But on the other hand, job functions are the major segments of your work or those general areas in which you are held accountable for producing results. The ideal approach for establishing job functions is this: The administrator independently writes the major job functions of the staff members' position. The staff member independently writes his own job functions. The administrator and staff members meet, discuss the job functions, and mutually agree on the content and relative importance of each job function.

In most existing organizations, the first step has been omitted; beginning with the second step, and then the negotiation (the third step) allows the administrator to have an input into the job functions of the individuals. This process has worked satisfactorily in existing organizations. The next step after the job functions, then, is to write job objectives for each of the job functions. Job objectives are short statements that define the results expected of a person in each function within a specified period of time. This system allows the individual to more nearly taylor the job to fit his uniqueness while fulfilling the demands of the organization. This is a process where the individual and the organization negotiate on what the job functions of the individuals are and then set up those objectives that relate to the job functions in order for the individual to achieve the overall organizational objectives relating to his area of responsibility.

Why is this a good system? One major factor is the fact that it is a fair system because the individual has an input into setting the level of achievement and identifying what his particular function is in the organization. A question often asked is, "How do we give recognition to individuals who have difficult objectives versus those that have easy objectives?" This is handled by the following procedure: at the time the individual and supervisor

negotiate the objectives and agree upon them, a level of difficulty is determined on a scale ranging from extremely difficult, difficult, some sifficulty, easy, and extremely easy. There is also a place on the form to identify the achievement of the objectives ranging from exceeded, achieved, partially met, lettle done, no activity. If we give this an index from extremely difficult--5 to extremely easy--1 and from exceeded--5 to no activity--1, then we can see that an individual may have an extremely difficult objective which is an index of 5, he partially met it, an index of 3, which gives a total index of 15.

On the other hand, an individual may have an objective of some difficulty, an index of 3, he achieved it, a 4, which would give only an index of 12. So recognition is given to individuals who have extremely difficult objectives even though they did not fully meet those objectives. There is nothing wrong with not meeting an objective, provided we can identify why the objective was not achieved. One thing should be clearly pointed out. The benefit of a good management system is that it allows us to improve the management of the organization. Only after we have identified why an objective could not be carried out, then and only then, can we start to take steps to improve the situation that caused the problems in achieving those objectives. Without identifying the cause of the problem, very little improvement can be made. At this time we have completed the planning phase of the management system. The next step is implementation. The only two parts of implementation that I would like to spend some time with are those of delegation and motivation.

Delegation is defined as the act of allowing one staff to accomplish the assigned task. It includes the impartment of the responsibility to achieve

objectives, and accountability for achieving objectives. With proper delegation we should open the communication channels. No longer do we have everything coming from the top. The leadership for the organization objectives come from the top, but the individual has an input into this and it becomes a negotiated circular system of management rather than a dictatorial system of management and the communications up and down the line should be greater. Leadership for the objectives to be accomplished is passed from the top down to each level of management. At each level the commitment to the actual accomplishment is reviewed and accepted by the individual and passed back up to the administration. At each level this negotiation takes place and upon completion every individual to the bottom of the organization has negotiated his commitment to the objective to be carried out for the organization. Another important aspect of delegation is the fact that an individual can't be accountable for something if he isn't delegated the authority to carry it out. At the time the supervisor and the employee negotiate and review the objectives the authority for each objective should be delegated so the individual knows what authority he or she has in carrying out the objectives. Authority should not be confused with power. The degree of authority that we are talking about is the authority that it takes for an individual to be able to achieve the objectives that have been mutually agreed upon between the administration and the subordinate.

Many people however, feel that when authority has been delegated to them that this gives them the power to become the Creator himself. This is not the kind of authority that I am talking about. A rule of thumb that should be used is that an objective should be delegated to the lowest level

in the organization in which there are individuals capable of meeting the objectives. Another item that might be of interest indicated in the literature is that if an individual is working fourteen to sixteen hours a day, six days a week, he isn't delegating enough.

The second area that I want to talk about is implementation and motivation. Many times we suffer from the central office syndrome. Every boss just knows that all employees are lazy and untrustworthy. Every employee just knows that the boss is dumb and does not know what is going on. Motivation is the activation and direction of behavior, and motivation has to be an internal thing. We don't really motivate people, we provide people motivators. One form of motivation used is the negative approach to motivation--in other words, the stick. This negative form of punishment is not very acceptable or very effective in a democratic society, however, the positive approach to motivation, or the reward type is effective.

This is, in effect, where we dangle something out in front of individuals or provide them with the motivator that it takes to entice them to do a good job. I would like to tie this back into Maslow's hierarchy of needs. At the time that I first became acquainted with Maslow's hierarchy of needs it didn't mean much to me because I couldn't associate it with anything. Only recently in working with people have I begun to see how Maslow's hierarchy of needs fits into the motivational pattern. Most people in today's society have their basic need for food and water satisfied. Most people are relatively secure, and the need of love and belonging is satisfied. If not, we can do this with a fraternal, social or civic organization that we belong to. When we look at what it takes to provide motivation, we are up

into Maslow's self-esteem and self-actualization needs for individuals. Every individual wants to do a good job. He wants recognition, reputation, prestige, etc. Also everyone wants to be able to become everything that he is capable of becoming. So when working with people we have to recognize at what level we need to provide the motivators and provide individual staff those motivators that it takes to motivate them.

You can't talk to individuals about what a good job they have becuase they have two weeks vacation, social security, and sick leave. Everyone offers these things today. So again I would like to emphasize that it is very important to identify what motivators are needed to entice the staff to do a good job. If we provide individuals with the recognition or motivators that they need, we might stop some of the ego screaming because the individuals have had an input in the planning and they also have recognition for their accomplishments.

The last phase to be covered is the review development of the management system. This is probably the most important part of a system and when working with people the one that I feel will most likely cause the organization not to be able to implement the system. An example is that of the fear factor; the boss is afraid to assist and evaluate face to face, and the employee is afraid to inform the boss of his problems. Simply stated review processes involve looking at the planned accomplishments and the actual accomplishments. Performance review is defined as the evaluation of the performance of each staff member in terms of how well previously established job functions and objectives have been accomplished. There are several factors that should be considered. Have the job functions and objectives been well defined? Has the individual had

an opportunity to perform? Has the individual had the assistance that was necessary? Has there been a reasonable working relationship between the individual and his supervisor? It is important to call your attention to the last item. In conducting a performance review, make sure that the individual is evaluated on the objectives that have been agreed upon mutually by the supervisor and the employee and how well he has achieved those objectives. Don't get into the subjective part of evaluation where people are judged on the way they wear their hair or the associations that they may have with other members in the organization. As long as an individual is working in the parameters that have been defined by the organization for the employee to work, then the individual should be reviewed on the merit of how well they have performed according to the objectives that have been mutually agreed upon.

There is a monitoring component to assist with evaluation or some milestones as progression is made during the year. Monthly evaluations are recommended. Where at the end of each month the individual submits a written report stating the status of his objectives, it is recommended that the report be composed somewhat as follows: This is what was done this month that wasn't scheduled. This is what wasn't done this month that was scheduled. This is what is planned for next month. These are the problems that may be encountered. Then each quarter there should be a regularly scheduled quarterly review where the individual knows that he is going through a formal quarterly review. Then a yearly review should be conducted to see how well the objectives that were set forth for that time frame were accomplished. This monitoring system is a very effective way to keep the communications channel open throughout

the organization. Another aspect of this is that if some objectives need to be changed or if the objectives are falling behind, then an opportunity exists to communicate to the next level of administration those changes that need to be made with the status of the objectives. In order to have an effective management system, it must be flexible. Plan around those things that are known and recognize that there are going to be external factors that may necessitate changing some objectives. What in the beginning may have appeared to be a good objective under a time frame, may at some point in time during the operational year not be as good an objective as first identified due to some external factors. The monitoring system gives a mechanism that is needed to communicate the status of an objective. Everything about a management system isn't peaches and cream. Some of the major difficulties are presented.

After a general orientation, it is generally found to be true that there is a lack of understanding by the supervisor or staff members of what they are supposed to do. A second difficulty is a failure to follow up and periodically evaluate accomplishment of goals or plans. As stated earlier, this step is the one that is most likely to cause failure of a management system. The third major difficulty is that the procedure takes too much time and there is not enough time available. While the system does take a lot of time, one of the things that the educational environment has been guilty of is not putting enough time into planning. We always are going from crisis to deadline. If the appropriate amount of time that it would take to plan and to set up things is taken, then the organization would be operating much smoother. So looking at it from the standpoint of planning, it probably does not take too much time. The fourth is the lack of co-operation by supervisors and resistence to change. I would like to raise a question: Do

you resist change? Most of you would indicate that you do resist change, and I propose that you do not resist change, but you do resist being changed. Change is probably the only thing that is constant in today's society. Why do you resist change? One of the reasons relates to one of Maslow's hierarchy of needs. When you feel secure in doing things that you know how to do well, you are afraid to change. Something new scares you a little bit so you resist it. Another question: How is anything ever made better? By changing it. Nothing that I know of has ever been made better unless it was changed. Now I don't imply change for the sake of change, but if after planning is done, a change needs to be made, then nothing is going to improve unless some changing is done. Again, not change for the sake of change. The fifth and last difficulty is just plain old lack of interest or apathy. In any organization that you work with, one or two percent of your employees will be apathetic towards the management system. There will be no interest expressed, so you have to recognize this when dealing with people inside the organization.

An effective management system is a system where people are influenced by it. They understand and agree with its purpose, they know how to use and control it, they can influence its revision, and they receive timely feedback. Some strategies that may be used for implementing a system of management are: (1) Assure top administrative support, (2) Do a trial run in one segment of the organization, (3) Test it for one year to see if it works, (4) Assign specific responsibility to someone within the organization, and (5) Provide the time and assistance that are necessary to get the system established.

What will a management system do for you? (1) It forces you to look realistically at your job, (2) It provides feedback on how well you are doing your job, (3) It established priority for your effort, (4) It allows you to

accept responsibility, and (5) It may attach dollars to activities. In summary, the organization has a self-directed and defendable function evaluated on accomplishments. I would like to close my formal presentation with a quote and a comment. "We could say everything is going according to plan, if we had a plan." Start a revolution in your area of responsibility. Establish a management system and a training program for your staff.

DEVELOPMENT AND IMPLEMENTATION OF A COORDINATED PROGRAM OF INDUSTRIAL ARTS AND TRADE AND INDUSTRIAL EDUCATION

Mr. Lawrence Foth

Articulation in Industrial Education is an often-mentioned, seldom realized process which only in recent years has received a performance challenge. Personnel within the respective areas with which this topic deals have long been at odds relative to the functions to be served in either area. A plethora of enigmatic charges and counter charges has been bandied by parties involved in an effort to dispute the existence of a logical relationship between Industrial Arts and Trade and Industrial Education. Turfsmanship of this kind has precluded an earlier understanding and acceptance of any workable arrangement for articulation.

However, these things began to change in the early part of the past decade. Two major pieces of federal legislation implied a role for Industrial Arts in providing career awareness for students. It was this incentive that finally led to beginning discussion of relationships of program goals in Industrial Education. Kansas educators joined the ranks of those who were actively seeking out alternatives to the separately functioning instructional components. Much of the information for this presentation will be drawn from articulation processes which were experienced in Kansas. This is not to imply that the given example is superior to systems in other states, but rather to serve as a point of departure for the presentation.

A Historical Perspective

Until 1969, the named instructional components were managed by separate state agencies, namely the State Department of Vocational Education and the State Department of Public Instruction. Legislative mandate at that time formally merged these into a single State Department of Education.

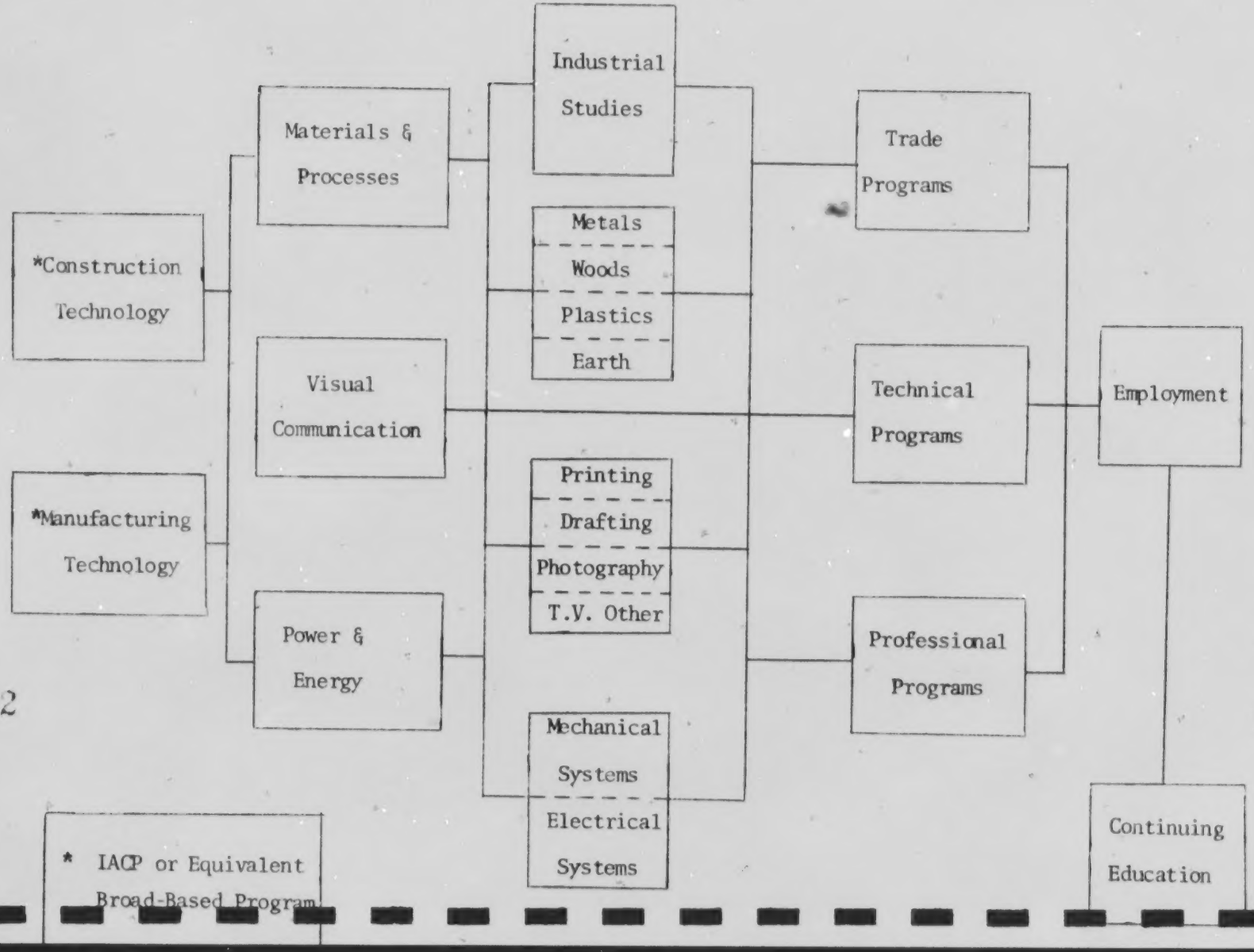
However, the above named problem still received no intense scrutiny until 1971. The Industrial Arts Consultant, housed in the Division of Instruction, and the Trade and Industrial Education Supervisor operated largely in contradiction of one another, not necessarily by intent, but simply because of the nature of the funding structure in the state relative to vocational education. After a great deal of discussion among classroom teachers, teacher educators, and agency personnel, a model identifying the scope, sequence, and relationship of Industrial Education concepts was presented for adoption to the State Board of Education. A copy of that model follows on the next page.

That model, subsequently identified as the Kansas Plan for Industrial Education, suggests a continuum of learning experiences which takes the student through sequential steps of awareness, exploration, preparation, and specialization. These steps are identified in four basic objectives, stated as follows:

1. To examine the society-industry interface and identify the components of industry, both detrimental and beneficial, that effect people.
2. To provide exploratory, problem-solving experiences which will help the student understand how tools are utilized as an extension of man's physical capabilities, thereby increasing his efficiency and earning productivity.
3. To provide occupational information concerning the wide array of opportunities provided in the world of work, information concerning both the composition of the labor force, as well as the talents and abilities required by that labor force.
4. To provide, subsequent to occupational exploration, opportunity

New Kansas State Plan For

INDUSTRIAL EDUCATION



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for the development of realistic employment skills and ultimate realization of employment goals.

These statements are presumed to fulfill the best objectives of Industrial Arts and Trade and Industrial Education.

Subsequent to this re-direction, an attempt was made to identify the attitudinal and physical roadblocks that might preclude ultimate realization of prescribed objectives. There appeared to be many, summarized as follows:

1. An attitude among many administrators, trade level instructors, counselors, and general public that Industrial Arts is busywork, a place to enroll kids who can work with their hands and not with their heads.
2. Many Industrial Education programs were stale, having existed unchanged for many years and presuming to "stick" subsequent generations with warmed-over content from the past in lieu of contemporary industrial practices.
3. While students have generally accepted dominant social values in the past, today's learner chooses to challenge them. An example would be industry's pursuit of profit at the expense of ecological imbalance, environmental pollution, and diminishing natural resources. Teachers have difficulty in accommodating this kind of challenge.
4. Society in general and education in particular have been wont to categorize students according to impose goals rather than providing a diverse spectrum of information upon which students can base well-informed and meaningful personal choices.
5. For many years teacher education institutions were reticent to take a leadership role in curriculum renewal or to accommodate

contemporary thought in their programs. Therefore, many teachers were leaving those institutions ill-prepared for program development at the local level.

Consequently, the articulation process took on additional freight as it gained momentum. The magnitude of the task required that personnel in addition to state staff become involved in developmental activities. Furthermore, funds were needed to buy essential functions pertinent to those activities.

The Kansas Model for Industrial Education

The components of such a continuum are not identified without a great deal of difficulty. At the time these decisions were being made, some research had been conducted relative to alternatives to conventional Industrial Arts content. Such alternatives had reached various stages of development, from mere conceptualization to piloted, commercially ready documents. The latter, referred to as the IACP materials, were studied at length and ultimately recommended for adoption as a base for the continuum, with the full realization that content would be taught in various ways to accommodate unique local circumstances.

With that decision as a point of departure, further study was done relative to subsequent curriculum alternatives. It appeared that there was a national trend toward acceptance of three conceptual areas of study; power and energy, materials and processes, and visual communications. Various authors were suggesting other alternatives, some only subtly different and others dramatically divergent in their approach.

Development Activities. In late 1971, two curriculum projects were funded simultaneously, one from ESEA funds and the other from vocational funds. Due to the emergency state of the art and attendant efforts to meet critical curriculum needs of the time, much difficulty was encountered in supervision of developmental activities. In the ESEA project, identified as "Secondary Exploration of Technology" (SET) personnel from three different sized school districts undertook the task of identifying content for the above-named areas. An additional focus was to interpret these concepts in light of unique school circumstances such as resources, student enrollment, number of teaching personnel, and others.

The second project, referred to as "Conceptual Base for Industrial Education" (CBIE) involved forty-five teachers from the immediate Wichita vicinity in an extensive workshop situation aimed at curriculum development, also for the early secondary level. While the identified concepts were very similar, the philosophical approaches to delivery of instruction were unique to the separate projects.

The common focus on the aforementioned concepts led to their acceptance as second level entities in the state model for industrial education and provided two different sets of documents for local selection. The materials were used extensively in the various project schools and revised extensively. Subsequent to the conclusion of these projects, CBIE and SET, funding was secured for the third level curriculum study. Course materials were developed in the derivative or component areas of the level two concepts with emphasis on specific occupational information. In addition to these documents, special guidelines were developed for "Individualizing Instruction"

and "Industrial Studies". Personnel from the above named projects joined forces in writing these materials. All materials from the curriculum endeavors are now available for state-wide distribution through the vocational curriculum laboratory at Kansas State College of Pittsburg along with the level four guides developed through the Mid-America Curriculum Consortium centered in Oklahoma.

Professional Development. While instructional material needs were being addressed quite adequately through developmental projects and consortium involvement, other program needs became increasingly clear. Colleges and universities in the state were working diligently to provide in-service activities to bring both prospective and practicing teachers up to date regarding contemporary thought in Industrial Education. However, much difficulty was encountered in arousing interest among teachers who were confused by new titles and concerned about personal inadequacies to manage the new content. A special appeal was submitted for EPDA funds to take the program to the teachers.

A full-time coordinator was employed to organize this special activity, the objectives to which were to:

1. To stimulate the teacher to inquire about recent change and growth in industrial education.
2. To rid the teacher of fear of involvement in curriculum renewal.
3. To motivate the teacher to get back to the college classroom to renew his teaching skills.

Industry was approached to provide atypical kinds of equipment to the project for the purpose of demonstrating, for teachers, activities related to the three second-level courses. The equipment was uncommon in that few teachers in the field had ever had an opportunity to operate it. These items were loaded into a large, leased fifth-wheel van for transport to thirteen host sites to which area personnel were invited. Specialists in the three identified course areas, primarily from teacher education institutions, were brought in to provide special instruction. Participants, including personnel from all four levels, were also given some basic information relative to the state model. Between two hundred-fifty and three hundred teachers were involved in the workshop activities.

A rash of serious injuries in industrial education laboratories yielded evidence of yet another critical need in the field. Funds were subsequently obtained for a concentrated effort to bring about a more acute interest in safety. The classroom teachers are currently being trained in all aspects of laboratory organization to provide direction for the activity. These personnel will then be required to conduct twenty field workshops in their geographical areas. Special emphasis will be given to provisions of the Occupational Safety and Health Act and its presumed impingement on laboratory practices. Performance objectives for the project include a twenty percent growth as indicated by pre-test and post-test comparison. It is also presumed that some measurable attitudinal gains will result from the activity.

Another activity is also currently dealing with the problem of building a certification model consonant with the state model. Discrepancies currently exist relative to professional requirements for the various levels

of instruction. An effort has been made to draft a listing of cognitive and psychomotor competencies required to teach the respective levels. The Kansas Industrial Teacher Education Council, comprised of department heads from all state and private institutions with industrial education programs, has assumed much of the responsibility for research and development in this area. The present stalemate in this activity is an obvious indicator of the difficulty in reaching consensus in that critical effort. The major points of discussion have been:

1. Should industrial experience be a requirement for instructors at every level?
2. Would it be appropriate to require teacher preparation courses in levels one through three for trade level teachers?
3. Should all teachers ultimately be required to have a degree?
4. What are the most immediate course needs of the non-degreed trade instructor coming into the classroom?

One would have to agree that the need for solutions to these questions makes the certification process the most pressing issue at this time. Some type of funded activity will ultimately be required to bring interested personnel together in an intensive decision-making session for the purpose of identifying future direction in this area.

Funding. The Higher Education Amendments of 1972 very precisely identified Industrial Arts in Vocational Education legislation as instruction which might facilitate informed and meaningful career selection on the part of the student. The model for industrial education in Kansas was, subsequently,

identified in the state plan for vocational education. All levels of the plan, therefore, are eligible for vocational funds.

The State Plan for Vocational Education, in addition to establishing management policy for distribution of state and federal money, provides for a local tax assessment for vocational education. This has been vital to the expansion and improvement of instruction in Kansas schools. Furthermore, large amounts of state and federal resources have been committed to curriculum work, professional development, and certification study. In spite of all that has been accomplished, much effort must be expended to bring about a general state-wide application of contemporary program concepts. Limited personnel resources have hampered, somewhat, a more rapid implementation of approved guidelines.

Conclusion

The advantages of an articulated program of Industrial Education effort are innumerable. Assistance for Industrial Arts at the local level was formerly handled by one person. The Trade and Industrial Education Section was staffed with two positions. The merger and subsequent acquisition of an additional position provided a four-member staff serving multi-level functions. This contributed to early rapid growth of the Industrial Education concept in the state. Present economic and political constraints have forced temporary curtailment of some of the activities. However, the program appears viable and, pending removal of imposed personnel restrictions, should continue to grow. Further information can be obtained by writing:

Ed Henry, Program Administrator
State Department of Education
120 East Tenth
Topeka, Kansas 66612

PSYCHOLOGICAL SKILLS AND WORK ATTITUDES NEEDED BY EFFECTIVE TRADE AND INDUSTRIAL INSTRUCTORS IN THE YEAR 1979

Dr. George T. Mannen

Gentlemen: It is a genuine pleasure and honor to be invited to address you today. Too often I only talk with other psychologists and while that is usually pleasantly fraternal, I more eagerly am looking forward to getting to know some of you whose professional fields are quite different from my own. As soon as I say that, I begin to think of some similarities. I work clinically with a lot of frightened people who are unsure of themselves in a changing personal, social and economic world. I work with some people who worry about earning enough money to adequately support their families. I work with young people who are confused about their identities. I believe that psychologists have not fully explored how important one's work is to a healthy or unhealthy self concept. Most of you work with some of the people and situations that I have mentioned. If you can teach your students to value their individual and collective competencies as they develop under your instructions, you will at the same time be teaching a positive self concept. I hope the day will soon come when society eliminates its destructive snobbishness concerning different jobs, occupations, vocations or professions. I could argue that all of these terms mean the same. However, the prestige value connotations vary greatly--too greatly. "I'm just a carpenter", "I'm just a house painter", "I'm just a LVN", "I'm just an electronic technician" or--"I'm just a school teacher", "I'm just a _____" that preface to oneself is really a put down. I'm glad that my LVN mother and my carpenter-house painter father never put themselves down viously. The effective T & I instructor will teach his/her

students to value themselves as well as become competent in a given field. That sentence could be reversed--if you teach a person to be competent in a skill, some ego enhancement will follow. We need to begin with ourselves by valuing what we do.

Let us take a broader view of the task of deciding what will be the psychological skills and work attitudes needed by effective Trade and Industrial teachers in 1979--and in 1976--and probably in 1989. First, what is the task of the T & I instructor? Is it to learn one procedure, one skill, one methodology exceedingly well and not change ever again? No--the effective teacher needs to be and remain flexible. How does one prepare an instructor to adequately teach subjects or jobs which haven't been invented yet? How do you get an instructor to stop teaching facts, procedures, or attitudes which are no longer valid?

I want to spend much of our time together discussing the changing world we live in and the rapidity of that change. The implications for T & I instructors seem immense.

During 1967-68, I was teaching in the European Division of the University of Maryland. The University stretches Europe to include parts of North Africa so I found myself teaching in Tripoli, Libya. As I finished the Spring term in Tripoli, I received a request that I arrive ten days earlier than usual to teach a Summer term in England. I left North Africa on a Friday afternoon and arrived in Frankfort, Germany that same afternoon. I then took a train to Heidelberg, Germany to pick up my car which had been in storage. On Sunday, I drove to Holland where I took a ferry to England. By Monday afternoon, I was lecturing a Menwith Hill two hundred

miles north of London. Using four methods of transportation it was possible to make that trip in a weekend. Traveling those distances so rapidly would not only have been impossible for our grandfathers; it would have been beyond the imagination of most.

I returned to Libya in August 1968 as a guest of the then Kingdom of the Libya to deliver a brief lecture on "Education in a Changing World" at the First Annual Conference on the Welfare of Libyan Youth. One of the points made in that speech I want to make today is that the world is changing rapidly but education often is not. We must be psychologically prepared to adapt, cope, and innovate to avoid becoming ineffective or even obsolete. Change threatens some people so much that they waste energy denying the reality of it. However, change has been accelerating during our life times at an incredible pace.

Land agriculture employs fewer than 6% of our economically active population. Now agriculture is extending into the ocean. In 1966, Dr. F. N. Spiess, of the Scripps Institution of Oceanography said, "Within fifty years, man will move onto and into the sea--occupying it and exploiting it as an integral part of his use of the planet for recreation, minerals, food, waste disposal, military and transportation operations, and as populations grow, for actual living space." Change is taking place so rapidly that prophets become historians in a short time. All of these predictions have come true either in fact or in viable protypes. In October of 1975, I visited the Exposition on Okinawa. Japan's exhibit was an elaborate "fish farm" in the sea. At Moss Landing, California prawns and lobsters are being grown to maturity in less than one half the usual time. This experiment is possible because of a nuclear power plant.

Alvin Toffler's book, Future Shock, might well be required reading for all of us. For example, he tells us that 90% of all the scientists who have ever lived in the world are alive today. This has tremendous implications for the future of technology and the changing and even more influential role of T & I instruction. It is often the T & I instructor who will show society how to put to operational use the new knowledge created by our scientists.

We have become a mobile society. Birth to death used to take place in one's house--neighborhood--village. Now, many people never buy a home. Toffler points out that in 1955, apartment houses accounted for only 8% of new housing starts in the USA. In 1961, it was 24% and in 1969 there were more apartment starts than for private homes. In Sacramento, California, the average home is sold in less than four years. Toffler states that from March 1967 to March 1968, 36,600,000 Americans changed addresses. Technically trained persons changed more frequently than the average. This means that we must not assume that our students will remain in the community where they are educated. They need to be prepared to adapt to various environments.

Social changes may accompany technical and social inventions. Newsweek of January 12, 1976 states that 15,000 girls under 16 sought help at Planned Parenthood Centers in one year. It was not unusual to see a 12 year old at one of the Centers. We must not see our teenage students as kids but as young persons about to be fully enfrancised adults. Many of our T & I students come from backgrounds where they are thrust into adulthood or at least into adult responsibilities before the average middle class student.

Some of these students stand uncertain between childhood and adulthood. We need to teach not only technical skills but also social and psychological skills such as effective communication with employers and peers, punctuality, orderliness, and how to apply for a job in some cases.

We must help reduce sexual stereotyping. I see only three or four women at this conference. In the future there will be many more. One of the most attractive T & I instructors that I have met teaches electric shop in Southern California. We now have women entering many non-traditional fields for women and doing well. There are women carpenters, electricians, jet engine mechanics, jockies, navy pilots, building contractors, etc. We need to see possibilities rather than unsurmountable obstacles.

Clearly the effective Trade and Industrial instructor is going to need to understand the past and the present and have a sensitive awareness of the possible and probable future so that he/she will not train conforming students to fit into a 19th century mode of docile factory workers. Today and tomorrow's T & I product needs to be encouraged to think for him/herself. We must teach students to be decision makers not dependent on rigid definitions of job function. One year after starting Chicago's 100 story John Hancock Building it began to sink into the ground because of air pockets in the concrete caisson footings. The repair bill was $1,000,000. Perhaps if all workers on this job had been observant and communication channels open, this expensive mistake would have been averted. Safety hazards on many projects may be noticed by the newest person on the job if he/she is trained to be aware and to communicate that awareness.

The T & I instructor should help his/her students to keep an open viewpoint about the future. There is a great likelihood that one's

students may later develop other skills or even a different vocation. Help your students to be aware of external degree programs, TV courses for credit, company sponsored education, travel for credit, stop out programs, home courses--unique ways of mastering new material--e.g. computer assisted education.

The effective T & I instructor is going to make his/her influence felt not only in the area of his/her speciality, but broadly also. He/she needs to be on curriculum committees and policy making bodies--e.g. he/she might insist that electrical students, LVNs, bio-medical equipment technicians or anaplastology technicians be required to read at a certain proficiency level. Note that we have 23 million functionally illiterate (Todays Education, January-Fedbruary 1976).

T & I instruction is a critically important part of general education as well as speciality education. Note the ego enhancement value and leisure time value of many of the T & I specialities. In many cases the T & I instructor will be a community activist. In appropriate fields he/she will need to be aware of union policy and may need to influence that policy.

The effective T & I instructor needs to be aware of the ways in which different people learn. In the January 1976 issue of Psychology Today, "What A Coach Can Teach A Teacher" by Drs. Roland Tharp and Ronald Gallimore. John Wooden coached UCLA's basketball team to 10 national championships in 12 years. He is the only person ever inducted into the National Basketball Hall of Fame both as a player and as a coach. Let's look at a breakdown of Wooden's techniques:

Analysis of Teaching Techniques	Percentage of Communications
1. instructions - verbal statements about what to do or how to do it	50.3%
2. hustles - verbal statements to activate or intensify previously instructed behavior	12.7%
3. modeling - positive - a demonstration of how to perform	2.8%
4. modeling - negatively - a demonstration of how not to perform	1.6%
5. praises-verbal - complements, encouragements	6.9%
6. scolds - verbal - statements of displeasure	6.6%
7. non-verbal reward - non-verbal compliments or encouragements (smiles, pats, jokes)	1.2%
8. non-verbal punishment - infrequent use of scowls, gestures of despair, temporary removal of player from scrimmage	trace
9. scold/reinstruction - a combination category: A single verbal behavior which refers to a specific act, contains a clear scold, and reasserts a previously instructed behavior, e.g. "How many times do I have to tell you to follow through with your head when shooting?"	8%

10. other - any behavior not falling into the above 2.4%

11. uncodable - behavior could not be seen or heard clearly 6.6%

Note the emphasis on the positive and the patient repetition of instruction.

Wooden did not use ridicule, shaming words like "stupid", or expressions of hostility to get students attention or to give instruction. Negative reinforcement is risky because it generates covert if not overt hostility in the recipient.

Summarizing--the effective Trade and Technical Professional teacher that I envision will not be threatened by the brilliant nor bored by the untalented student, but see each as a person meaningful in his/her own special way. This teacher will be flexible and open to change. Differences in people will be valued. This teacher will have an awareness of the future. This person will be a sensitive listener and willing to learn from students as well as teach them. Lastly this T & I teacher will model the behavior that he/she wishes students to emulate.

COMPETENCY BASED TEACHER EDUCATION

Dr. Robert E. Andreyka

Overview

Of the many trends and innovations in the field of Vocational Teacher Education, some are more significant than others. Competency-Based Teacher Education (CBTE) is one of these trends. Putting CBTE in its proper perspective, some of the other significant trends include: (1) certification of vocational teachers--not by completion of courses, but by demonstration of teaching competencies; (2) the emergence of the teacher center act; and (3) the increased emphasis on the inservice education of vocational teachers.

The term "Competency-Based Teacher Education" or perhaps Performance-Based Teacher Education appears many times in literature, and is mentioned in professional meetings and such. The terms are used synonymously, but we prefer the term "Competency-Based." The term Competency-Based not only implies actual performance by the teacher, but it also implies a minimum acceptable level of competence in that performance. The CBTE approach focuses not on the occupational or technical competencies, but rather on teaching competencies needed by the successful teacher. These are referred to as professional competencies.

Definitions vary, but there seems to be three very basic characteristics of a truly competency-based program. (1) such a program identifies competencies important to teachers. By important, we mean those knowledges, skills, and attitudes which promote learning in students. After these competencies have been identified, a CBTE program must (2) provide learning activities which focus

entirely on the mastery of these competencies. Finally, (3) assessment of how well these competencies have been attained is carried out in a real teaching situation.

There is nothing really new about the concept of Competency-Based Education. Vocational teachers have for years used this approach to produce occupationally competent graduates. They have identified skills, used behavioral objectives, learning modules, and other elements associated with competency-based education. The newness is that we are now applying the competency-based approach to the occupation of teaching.

There has been a need for a different approach to preparing vocational teachers, because there are some basic shortcomings in the traditional course-oriented approach. Competency-Based Teacher Education seems to fill these voids.

1. There is a need for a teacher training program which is built entirely upon the actual professional needs of teachers, rather than unrelated theory and other informational aspects.
2. The need exists for an instructional program that will meet the individual needs of teachers.
3. A need for evaluation devices and procedures which focus on the teacher's performance. That is, what the teacher can do rather than what the teacher knows.

Some of the advantages of the CBTE approach are evident when it is compared with the traditional approach.

Traditional Program	vs.	C.B.T.E. Program
Content-based		Competency-based
Time-based		Performance-based
Group paced		Individually paced
Classroom based		Field-based
Instructors		Resource Persons
Norm-referenced		Criterion-referenced

One of the most significant differences between these two approaches is the use of the teacher educator. The conventional approach utilizes the instructor as a disseminator of information, but in the CBTE approach, the teacher educator's role shifts to that of a learning manager, guide, and resource person. He makes learners aware of the objectives of the program, and then makes various learning experiences available. The instructor and other resource persons also participate in the assessment of the learner's work.

A final major distinction between the two approaches is in the evaluation of learners. Most traditional programs still use the normative-referenced measures, in which students compete against each other; however, the CBTE approach is based on a criterion-referenced mode. Expected levels of competence are identified and made public.

The importance of valid, pre-specified competencies cannot be emphasized too heavily. The attitudes, skills and knowledge needed by the teacher serve as the foundation for the instructional program. These competencies do not come from a textbook, but are based upon the actual role of the teacher. We examine what a successful teacher feels, knows, and does. Once the competencies

are identified, they are stated so that assessment or mastery of each competency can be determined by observation. Then, these competencies, which have been derived from the actual teaching role and stated in behavioral terms, are made public in advance.

Regarding the assessment aspect of CBTE, there are some pertinent questions. How does one propose to actually evaluate competency attainment? In response, the final assessment is carried out in an actual teaching situation whenever possible. Carrying competencies only to the simulation stage may be better than nothing at all, but this situation lacks the realism of an actual classroom with real students. The assessment of the teacher trainee's competency uses performance in the classroom as the primary indicator of mastery, rather than what he can recall on a test or exam. It is also important to consider evidence of the student's knowledge which supports the particular competency. This assessment procedure must be objective as possible.

The next logical question might be: What specific evidence or indicators are used to determine whether a competency has been mastered? Assessment criteria utilized are derived from the competencies themselves. They state conditions under which the teacher must perform and what the expected level of performance is for successful mastery. These criteria are made public in advance along with the competency statements themselves.

Florida's Commitment

The state of Florida is actively involved in Competency-Based Teacher Education. The various vocational service areas in the Division of Vocational-Technical Education of the Florida State Department of Education have begun exploring the CBTE concept. The Agricultural Education Section has formulated

a state objective for CBTE involvement: to prepare quality teachers and expose them to teaching situations through CBTE. The Section has identified 20 major professional competencies needed by agricultural education teachers in Florida.

The Vocational Business Education Section has established this statewide objective: to identify the areas in which Business Education teachers need to be competent and to provide the teacher with meaningful CBTE experiences. Sixty-one competencies have been identified for Business Education teachers. The Home Economics Section has concentrated their CBTE efforts on this objective: to identify essential student competencies and support them with teacher competencies. Activities are underway to identify these important student competencies.

The Florida Legislature supports CBTE by allowing for both approaches--the Competency-Based approach as well as the traditional one. A conference is held each year by the Florida Vocational Association (FVA), and in 1975, the entire FVA Conference was devoted to competency-based education at all levels. Mr. Joe Mills, Director of Vocational Education in the state of Florida, fully supports CBTE and has stated that "...the Division is committed to move totally into a competency-based approach..."

The Ohio Project

Florida State University has participated in the advanced testing of modules developed by the Center for Vocational and Technical Education at the Ohio State University. The Center is a research and development agency specializing in addressing problems in Vocational Education. This CBTE R&D project was begun in 1967, and is scheduled for completion by 1976. The project has been

funded primarily by the National Institute for Education (NIE). Briefly, this project identified and validated 384 professional competencies needed by vocational and technical teachers in all the traditional vocational service areas at all levels.

The first step in the competency identification process was a task analysis of vocational teachers and teacher coordinators. Introspection and interview techniques were used to identify a preliminary list of competencies. These preliminary competencies were then reviewed and validated by a panel of experts composed of teacher educators, state supervisors and master teachers representing seven vocational service areas in 19 states. Ninety-seven percent of the competencies were found to be common across all service areas, and very few differences were found between secondary and post-secondary levels. Next, a critical incident study involving 700 teachers was conducted. These teachers were asked to identify specific incidents that were critical to successful teaching. A final list of 384 professional competencies was identified in the first phase of the project.

The Center developed over 100 self-instructional modules to facilitate mastery of these competencies. The Center selected three universities to test these modules--Florida State University, Colorado State University, and Rutgers University. The Center is presently conducting a National Institute for CBTE under a contract with NIE. Activities began in 1975 with the selection of ten cooperating institutions of higher learning, one from each of the U.S.O.E. ten geographic regions. At FSU, over 150 modules have been tested. The testing involves inservice as well as preservice people, and has been used in group

instruction along with individualized instruction. All vocational subject areas have been involved.

Approximately 100 modules were developed in these ten categories:

1. Program planning, development, and evaluation
2. Instruction/planning
3. Instruction/execution
4. Instruction/evaluation
5. Management
6. Guidance
7. School/community relations
8. Student vocational organization
9. Professional role and development
10. Coordination

The process of writing these modules was a very lengthy, cooperative venture involving teacher educators, state department people, teachers, administrators, and supervisors. Although this development and review was very time consuming and quite costly, the Center felt that the modules produced would be of high quality.

In summation, the modules developed by the Center focus on one or more competencies, and provide for group or individual instruction. They are flexible, and specific materials for a given vocational service area may be used. Each module culminates with evaluation in a real teaching situation. Finally, the design of the modules allows the program to be tailored to the individual needs of teacher trainees.

Some problems have been encountered in testing the modules, as would be expected in any new endeavor. A major problem is how to fit the competency-based approach into the traditional university system based on courses completed in quarter hours. Also, some faculty members seem somewhat reluctant to become totally involved in the Competency-Based approach. Because there is a significant shift in the role played by the teacher educator, he/she now becomes a manager, resource person, and a guide--not just a lecturer. Another problem is the difficulty in assessing all participants in a real teaching situation. It is easy for inservice teachers to use their current classes, but it may be difficult to find a real teaching situation for preservice teachers. Resource persons who are well-qualified and who will take the time and effort needed to assist the project are scarce. Finally, there has been some difficulty with some students in this non-traditional approach.

Competency-Based Teacher Education for Industrial Education Teachers: Phase I

Phase I of a CBTE project for Trade and Industrial teachers was completed in the summer of 1975. This phase focused on identifying entry-level competencies. A program is needed which allows teachers more flexibility in terms of acquiring basic teaching skills. In many cases, the T&I teacher may have to take whatever college courses are offered in his geographical area, regardless of his immediate needs. This CBTE program will eventually serve T&I teachers as one answer to this dilemma.

Although Florida State University was the coordinating institution in this industrial education competency-based project, it was a total statewide cooperative effort. The project included state department personnel, teacher

educators, industrial teachers, supervisors, and administrators. All the state's universities which are approved to offer teacher education programs in trade and industrial education were involved. These were Florida State University, Florida Agricultural and Mechanical University, Florida Technological University, Florida International University, University of North Florida, University of South Florida, and the University of West Florida.

The project identified and validated minimum entry level professional competencies, along with specific assessment content. The project also reviewed many CBTE curricular materials available throughout the state and nation, and identified those materials suitable for Florida's industrial education teachers.

These were the key features of Phase I of the CBTE Trade and Industrial project:

1. Brought together research on CBTE from sources across Florida and the nation.
2. Implemented a competency-based certification program on a statewide basis rather than by institution or district.
3. Used an advisory panel made up of representatives from the State University System, State Department of Education (VTA), teacher certification department, and school districts.
4. Validated competencies and assessment criteria through workshops attended by industrial teacher educators, administrators, and teachers from Florida.

Competency-Based Teacher Education for Industrial Education Teachers: Phase II

Phase II of the trade and industrial teacher certification project is currently in progress, and is a continuation of Phase I. The focus of Phase II is to:

1. Plan and organize a competency-based preservice industrial education teacher certification program.
2. Plan a competency-based inservice program of staff development for industrial education teachers.
3. Establish a university level competency-based teacher education program.
4. Determine alternatives for funding competency-based teacher education.

Competency-Based Vocational Education Program at Florida State University

Project ACTIVE (Attaining Competencies for Teaching in Vocational Education) is being conducted by the Vocational Education Program at FSU, under the sponsorship of the Division of Vocational-Technical Education, Florida State Department of Education. The goal of ACTIVE is to identify professional competencies important to vocational teachers, administrators, supervisors, researchers and other personnel, and to develop a competency-based program to prepare these professionals at the preservice and inservice levels.

ACTIVE was begun in September of 1975 and initial activities have revolved around identifying and validating professional competencies from each area within the project. Each teaching, leadership, and special needs area is being coordinated by a team consisting of vocational education faculty members, graduate research assistants, and EPDA awardees. Activities of these teams are coordinated by a project coordinator under the direction of the project director.

Each team completed a review of the literature to identify a preliminary list of competencies for each area. This preliminary list was submitted to a panel for examination. These preliminary lists were revised and printed as a questionnaire and mailed to a sample of practitioners in the field. Respondents were asked to rate each competency as to importance.

A preliminary analysis of data has been completed with a more detailed analysis to follow. Data will be analyzed to determine competencies important to each target group within the project, and to determine common and unique competencies.

After competencies are identified and classified, specific assessment criteria will be identified and validated for each competency. Field-based assessment techniques and instruments will then be developed. Competency-based learning materials and activities will be developed to help current and prospective teachers and related personnel master competencies. Finally, this program will be implemented in the traditional university setting, and a program evaluation system will be developed and utilized.

The Trade and Industrial Competency-Based Teacher Education Program at Florida State University is the pilot program within this project. The categories and competencies included in this program are listed as follows:

A total of sixty-five competencies are proposed for the Florida Competency-Based Trade and Industrial Teacher Education Program. Thirty-six preservice competencies, designated by an asterisk (*), were validated in Phase I. The learner will attain these preservice competencies to the awareness or practice level prior to entry into the classroom/laboratory. The twenty-nine inservice competencies and criteria are presently being validated. The number of inservice competencies may change depending upon the results of the validation process. Except for the Orientation Category, mastery of all competencies will be assessed in a real teaching situation. The list does not include criteria statements.

I. Proposed Florida Competency-Based Teacher Education Program for Trade and Industrial Education

A. Orientation to Vocational Teaching - designed to give the instructor a brief overview of vocational teaching.

*1. Aware of the purpose of this teacher education program.

*2. Aware of the purpose and principles of Vocational Education.

*3. Aware of the purpose and scope of Trade and Industrial Education.

*4. Aware of teacher responsibilities.

*5. Aware of the steps in planning the instructor's work.

*6. Aware of district and local school policy and organizational structure.

*7. Aware of the student vocational organization.

*8. Aware of opportunities for professional growth, i.e. professional organizations, etc.

B. Preparation for Instruction - principles and techniques of planning and organizing instructional materials and preparing and motivating students to learn.

1. Analyze an occupation.

*2. Identify instructional objectives.

3. Plan a unit of instruction.

*4. Write a lesson plan.

*5. Select an appropriate teaching method.

6. Select and obtain instructional materials.

7. Prepare instructional materials.

8. Develop course of study.

C. Presentation of Instruction - principles and techniques for helping students master instructional objectives.

*1. Present a manipulative lesson.

*2. Present a related lesson.

*3. Employ oral questioning techniques.

*4. Present information with illustrated talk.

*5. Conduct group discussions.

*6. Present information with chalkboard.

*7. Present information with overhead projector.

*8. Present information using models/real objects.

9. Present information with films.

10. Present information with filmstrips/slides.

11. Illustrate with bulletin boards and exhibits.

12. Individualize instruction.

13. Conduct field trips.

14. Utilize resource person.

15. Employ brainstorming techniques.

16. Employ team teaching.

D. Application of Learning - principles and techniques for helping students apply what they have learned.

*1. Direct problem-solving activities.

2. Direct shop/laboratory experience.

3. Direct student study.

4. Direct students in instructing other students.

5. Employ technique of simulation.

6. Employ technique of role playing.

E. Evaluation - principles and techniques for evaluating students' mastery of instructional objectives.

*1. Assess student skill in shop/laboratory.

*2. Assess student knowledge in classroom.

3. Assess important student attitudes.

*4. Determine student grades.

*5. Conduct follow-up study to evaluate program effectiveness.

6. Evaluate instructional effectiveness.

F. Classroom/Laboratory Management - principles and techniques of managing time, materials, equipment, supplies, etc. for safe and effective mastery of instructional objectives.

*1. Organize and maintain the vocational classroom.

*2. Organize and maintain the vocational laboratory.

*3. Establish and maintain a filing system.

*4. Establish and maintain a student progress record.

*5. Provide for the safety/first-aid needs of vocational students.

*6. Manage equipment and supplies.

7. Project instructional resource needs.

8. Arrange for expanding facilities.

G. Human Relations - principles and techniques for effectively communicating with students, parents, colleagues, administration, community and others with whom the instructor must deal.

*1. Communicate with students, other teachers, administrators, lay men.

*2. Determine needs and interests of students.

*3. Relate to students to facilitate learning.

*4. Assist students in developing self-discipline.

*5. Employ reinforcement techniques in interpersonal relations.

*6. Demonstrate positive interpersonal relations within the school system.

7. Maintain occupational advisory committee.

8. Sponsor the student vocational organization.

9. Help students secure job or further education.

10. Utilize student personnel services or outside agencies to meet student needs.

II. Professional Role - designed to help the teacher develop a professional philosophy and the skills needed to increase professional and occupational competencies.

1. Express and display a personal philosophy consistent with the principles of vocational education.

2. Utilize opportunities for professional growth, i.e., professional organizations, etc.

3. Develop a plan to keep up-to-date in the occupational specialty.

Dallas Workshop

At the brief workshop that followed the mediated presentation, the participants rated each competency in the T&I program by the effort required of a typical beginning T&I teacher to attain each. The participants were then asked to identify those competencies that they felt were needed immediately by a beginning T&I teacher. The Dallas workshop provided a highly regarded national input into the refinement of these competencies.

Summary

The national involvement in CBTE has been somewhat surprising. Over thirty states report either legislative/administrative support for CBTE, or are studying the concept seriously. Approximately 100 teacher education institutions report that they are using a total CBTE program or alternate programs. At least 20 national consortia, institutes, centers or other groups have a primary or major function in the promotion of the CBTE movement. Appearing monthly are hundreds of articles, position papers, and monographs dealing specifically with CBTE. The national involvement has been positive regarding CBTE, but whether it will survive should perhaps be directed towards implementing the CBTE concept and making it work.

TEACHER AWARENESS OF STANDARDS:
NATIONWIDE CONSISTENCY OF POLICIES AND STANDARDS

Mr. B. E. Childers

It is a great pleasure to be asked to address such a diverse group of educators as those represented at this National Conference for Trade & Industrial Education Professional Development in Dallas. I am most pleased to see the greatly varied types of institutions that are represented. This shows the great variety of the kinds of involvement in the Industrial Education sphere by different institutions: universities, colleges, community colleges, technical institutes, vocational schools, and industries.

This diversity is good, and great care must be taken to assure that we never lose that diversity. The worst thing that can happen to our country is to ever allow ourselves to standardize, either the type of institution or the type of program in which Industrial Education is offered.

The topic at hand is that of certifying a new level of professionalism in Industrial Education. The fact that Industrial Education is still adequately insecure, to still be searching for professionalism, is one of the most singularly gratifying facets about Industrial Education that is conceivable. One of our greater faults of education is found among those institutions and programs that have found professionalism. Such programs "have it made" and need no longer to search for anything. These are the schools that are so adept at showing everyone that a simple replica of what we have is adequate and if everyone else would do as we do, no further search is needed.

This reminds me of my youth in the South where the people of our community were identified with clearly discernable characterizations. One of these groups was the "old aristocracy"; those of "quality" whose only concern

was for eliminating all contact with those who did not have "it". Woe and degradation fell to that house whose child chanced out of those hallowed halls and allowed the shades of darkness to mellow the light of quality. The result was that the quality of yesterday is today a dead yoke hung on the neck of progress.

Woe be to Industrial Education to allow any such yoke to drag us down.

Such aristocracy cannot be viewed with such disdain if you are looking at quality through the rosy glasses of the gentry. In these eyes there is only one goal - self replication. When outsiders chance on the gentry, then they must be cleaned up to respectability so that others of quality can drink mint julips without holding a perfumed napkin to ease the smell.

One of the facts of society is an unwritten law of "social gravity". Nearly everyone in our society seeks to raise themselves above their current social status. This is especially true of any parent for their child. The law stated in short form is, "Every person and institution seeks to raise himself to the next highest level of social acceptability". This is most aptly illustrated by the sequencing cycle that institutions go through when a vocational school "raises" itself to the level of technical institute, then "raises" itself to that of a community college, then senior college, then university, at which point branches are created to serve those of less quality in vocational and technical education.

The whole issue that I am seeking to state is, <u>"Whose value are we to use as a guide in determining what constitutes professionalism?</u>

Every industrial program has a diverse group of constituents to which it must relate - students, parents, alumni, academic, other industrial

programs, and industry. To my mind the first and last are the most crucial. Each of their concepts of quality vary in light of their perspective. What we in Industrial Education must do is relate to each of these pressures but still remain true to the basic philosophy of Industrial Education.

One of the greatest traps we are likely, and are falling into, is that of seeking acceptability by prostituting ourselves to one of these instead of a reasonable and rational balance with them all, with proper emphasis on those that are most crucial.

The student looks at a program in light of his objectives. If he is seeking a job with the training, then he must relate the professionalism to whether he can get, keep, and be promoted in a job with the training he receives. His basic motive for entering the program is to enter a career field and all ancillary activities relating to the school are immaterial to him at the moment. Degrees, certificates, credits, related activities, are immaterial to his basic goal - a job with reasonable expectations of success through promotion.

For the parent, professionalism is determined by the social status desired as a result of the job secured, resulting from the program. Cost and time involved in a program are of equal importance.

The alumni tend to think that each succeeding class should be made more difficult than the last to maintain the quality of other graduates and their competitors. Their concern is to the maintenance of their own level of competence and that the standards of admission and completion should be continually upgraded to maintain the profession.

We, in Industrial Education, seek acceptance of what we do by relating to other industrial programs. We all want acceptability by our peers and adopt many concepts and principles that are common to assure ourselves of peer compatibility. This is good to the extent that we are assured that equal recognition is worthy. In the event students elect to transfer to another institution with a comparable program, the opportunity should be available and only if the programs are similar, at least have common objectives, is such transfer possible. Students must not feel that their geographic locale limits their training opportunity and there should be enough of a common objective in programs to allow ease of transfer, and the opportunity to change when desirable.

One of our greatest considerations must be that we not seek acceptability to the exclusion of others. A common fallacy derived from the social gravity principle is that by lengthening programs and making the entrance requirements more difficult, the program takes on more prestige and is, therefore, of greater value.

To industry and business, value is determined by the quality of the graduate. How well they perform on the job and how well they get along with other people, fellow workers, supervisors, and the management. We must not lose sight of the fact that technical competence, compatibility with others, and responsibility are the three major requisites for all students and workers.

The personnel manager and supervisor expect the school to assure them of these characteristics when a graduate is certified as capable by graduation. Too often we assure ourselves that the provision of a technical

competence is adequate and we have completed our obligation once a student has skills and knowledge of a technology. Work habits are learned while in school: promptness, efficiency, care, concern, reliability. We cannot assume that all students come to us with these characteristics full blown, or that they automatically assimilate them. Care must be taken to assure the development, nurture, and growth among all students.

We must continually assess how students are utilizing those characteristics derived from the program. In order to do this, we must have clear in our minds exactly what we want them to achieve, how they are to achieve each objective, and how we can measure this achievement.

One of the most common ways of doing this is through advisory committees composed of those that employ the graduates, graduates themselves, and supervisors of graduates. Too often we claim the prestige of advisory committees but never use them except for quarterly dinner meetings, at which time we tell them what a good job we are doing. They must be involved in evaluation, follow-up, and development. I would dare guess that 80% of the advisory committees that are in existence are semi-active or not used to 20% of their potentual.

Our society has developed a strange paronia about academia. The academic community cycles through varied levels of community acceptability but has enjoyed a continuing love life that has not significantly lost fulfillment since the dark ages. A man with knowledge has everything. In the academic circle, knowledge is derived from the university, therefore, the ultimate is the academic university.

Much of education as it is practiced today has evolved around the university. All traditional sequencing of education eventually leads to the university and a degree.

A liberal education for all. Education for the sake of education. Give me a man that can read. Higher education for everybody. All of these parlous statements reflect a common concept; that academia has the answer to all the needs of society. Not many of us would agree with these statements as final, but do by tacit agreement by seeking academic acceptance.

The greatest threat to industrial education professionalism is the adulteration of industrial programs to make them academically acceptable. We are in a continuous process of adapting programs of the post secondary type to meet the terminology, characteristics, and quality of academic programs.

Education by tradition has a sequencing based on a numerical schedule classified by grades or levels. This schedule stats with grade 1 through 12, then college of levels 13 through 16, and graduate school level 17 through 19 or 20. In recent years, junior colleges have developed that fall into level 13 and 14. With the advent of post secondary schools of the technical specialty type, either as departments of the junior colleges or of separate institutions, they have been identified as compatible to level of 13 and 14 in order to relate to the tradition. For many in the academic community, the identity of industrial programs has been as terminal type, that is of lesser quality than the liberal education of college.

We claim, justly so, that there is not a lesser quality but a greater quality in Industrial Education, but still seek discreetly or

otherwise to be accepted in the academic community. We seek acceptance of our graduates into the four year school and too frequently encourage our students to aspire to more higher education in order to enhance the prestige of our programs and institutions.

We cannot afford to ignore the needs of those students that decide to seek further education, but should take care that we not lose sight of the purpose of our program.

We need first to establish that Industrial Education is not a level but a type of education. Forcing industrial programs into the characteristic of grades 13 and 14 is an artificial structure that does not relate to the needs of students, but results in a classification system to meet the quality identified by a segment of education whose main purpose is not the same nor frequently even compatible to the purpose of Industrial Education.

If a person graduates from a four year liberal arts college and then decides to attend a technical program, then the sequencing schedule referred to earlier means that the student is in levels 17 and 18. If he feels that he is going back to levels 13 and 14, he considers himself as repeating, which he certainly is not.

To become acceptable, academically, we have adopted a general policy of requiring high school graduation to enter industrial programs, but in many occupations this level of achievement is not necessary nor desirable. Program prerequisites and requisites should be based on the specific objectives of the program and not on a level of offering to meet someone else's structure.

Schedules for instruction are developed around artificial segments of instruction related to an academic calendar of quarters, semesters, or tri-mesters. These are not in order to provide a more perfect occupational program, but to meet the requirements of an academic calendar. This results in many programs being forced into constraints that make programs too long or too short to meet the full needs of the student or of industry.

Certification of students has evolved from the concept of stating the purpose and type of program completion to that of the degree. In order to be socially accepted, the Associate Degree is most frequently awarded for a two year program of instruction. This comes under the varying titles of Associate in Arts, Associate in Science, Associate in Applied Science, and more recently in the Associate in Technology. The main reason for each is to make them more palatable to the student and parent, because there is greater social acceptability for the title. The concern to industry is whether or not this term identifies more effectively the actual result of the program.

In order to meet the academic quality standards, a portion of each technical program is offered in academic subjects or sometimes referred to as related subjects. Where these subjects are actually related to the personal and technical competencies of an individual, they are indispensable. Too often, however, they are tacked on to make the program acceptable. We cannot lose sight of the need for developing more than a technician, and where these non-technical subjects accomplish this goal, then they are desired.

My thesis in this discourse has been to point out that professionalism is a relative term and is determined by the perspective of the beholder. There are several perspectives from which quality is determined. We, as occupational educators, must determine what attitude is most important. My theme is that the goal is serving students and, in turn, business and industry. If we listen to the cadence of the academician instead of industry, then we are not achieving a level of professionalism that will stand the test of time.

All quality is measured on a base of comparison. Whose measure will we use? I hope it is on the base of students and industry need.

ARTICULATION IN INDUSTRIAL EDUCATION

Mr. Robert D. Sartin

PART I: THE PROBLEM DEFINED AND DELINEATED

Introduction

Definition. Articulation, as defined in an educational dictionary, is the continuous and efficient progress of students from grade to grade and from school to school. The definition characterizes an ideal state, that is, full articulation is occurring when there is maximum progress of students.

A contrast: high value/marginal state. The value of articulation, the continuous and efficient movement of students is probably self-evident. Reasoning from the self-evident value permits stating that any practice which fails to support articulation or which actually obstructs articulation is automatically subject to examination with the probability of being isolated and removed as poor practice.

An observer of Industrial Education in the public schools finds that some students move readily from grade to grade through Industrial Arts classes and on to Trade and Industrial classes and/or Technical classes. The observer also notes that continuous and efficient movement for a significant number of students is not easy. If the observer recognizes that few students can move easily from one Industrial Education program to another, then the observer can conclude that articulation is marginal. When articulation is marginal, it is a problem of significant proportion which must be addressed by the responsible Industrial Educator.

The Source of the Problem

The problem of articulation is believed to be rooted in inadequate recognition of and control over elements in society which are significant and diverse. Conceptualization of the problem is taken from a behavioral scientist who suggests that diversity in any group inhibits communication and cooperation. Among the significant differences are the unique philosophical bases, goals, subject matter content, specializations, and definitions of membership. The diversity or differences inhibit communication and cooperation; inhibited communication and cooperation, in turn, create program isolation.

Operationally, the problem is manifested by varying degrees and forms of isolation whereby one class, program, or agency fails to interrelate with other classes, programs, or agencies. Isolation of programs of Industrial Education, and Vocational Education, hinders continuous and efficient movement of students or hinders articulation.

To compensate for program isolation, students draw more heavily upon their own resources: they expend extra effort, invest more time, and use additional personal money to compensate for isolated and/or conflicting educational practices. Marginally articulated programs are an anathema to best educational philosophy, an inhibitor of unqualified public support for education, an unfavorable reflection on the competence of practitioners in Industrial Education. Marginally articulated programs evidence inefficient educational administration; improved articulation must take a high priority in a period of difficult economic times.

Delineation of Diversity

Industrial Education is three programs. Industrial Education is not a single program with homogenous content. Rather, Industrial Education is a generic term which includes three major programs each of which has significant homogenous elements and significant variance from the other two. These programs are Industrial Arts Education, Trade and Industrial Education, and Technical Education. At least two principle characteristics contribute unity to the three programs. Each is an educational program and each is rooted in subject matter from industry; that is, in the manufacturing, fabrication or construction, installation, and/or servicing of hardware and soft goods. The validity of the use of the term Industrial Education stems from these common characteristics.

However, there are differences which must be recognized, be valued, and be communicated to present and potential students if students are to have a major role in guiding their educational lives. Students, armed with information about working within a coordinated program of Industrial Education, will more likely progress continuously and efficiently.

The following broad definitions highlight the diversity of the three programs in Industrial Education. Industrial Arts Education is first a part of general education. General education is required of all persons enrolled in public education as they progress normally from kindergarten through secondary education. When enrolled in the part of Industrial Arts which is general education, each public school learner is introduced to and explores the materials, processes, and occupations of industry. The exploration may serve one or more purposes such as

personal enlightenment, occupational career development, or leisure time activities.

The second part of Industrial Arts is specialized education. In contrast to required general education, learners in specialized education elect educational experiences as an extension of their exploration. These program offerings are more dependent upon community views regarding response to student interests and the investment of tax dollars.

Parenthetically, the public schools would be expected to offer parallel programs for exploration and for specialization in agriculture, home economics, and the practical or applied arts.

Trade and Industrial Education, in contrast to Industrial Arts Education, is a part of vocational education, rather than general education or specialized education. Like other vocational education programs, the intent is to provide learning experiences which are of a quality and quantity appropriate to acquiring competencies for gainful employment. Learners who enroll are expected to have a definite commitment to the development of occupational knowledges, skills, and attitudes. A major guage of program effectiveness and efficiency is the quality and number of job placements after course completion.

In Trade and Industrial Education, the various occupational programs, whether referred to as trade or craft, draw their subject matter from the requirements of journeyman-level practitioners. These practitioners are generally recognized for their skill at fabrication or service. In a complimentary fashion, the training centers around psychomotor or "doing" activities.

Technical Education is also a part of vocational education. Like Trade and Industrial Education, the learner in Technical Education is seeking preparation for gainful employment. In contrast to Trade and Industrial Education, the majority of the subject matter of Technical courses is expected to be comprised of mathematics and science. The work of the technician is distinguished by the application of mathematics and science as the technician designs, fabricates, and/or services a more complex line of hardware and soft goods than does the tradesperson.

Briefly reviewing, the three programs are rooted in industry--the manufacturing, fabrication, installation, and/or servicing of hardware and soft goods. Industrial Arts Education is exploratory and plays a part in both general education and specialized education. Trade and Industrial Education is for those seeking preparation for gainful employment. The emphasis is on the "doing" of construction or service. Technical Education is also vocational education. Those learners and practitioners in technical occupations are heavily involved in the acquisition of and application of mathematics and scientific practices in industry.

Specialization. Industrial Education, like many fields dealing with a complex world, has experienced the evolvement of several specializations. Today there are professional staff in specializations such as instruction, supervision, administration, teacher education, curriculum, research, and evaluation.

Staff and agencies in each of these specializations have functions, objectives, and activities which are significantly unique. Without effective coordination, these functions, objectives, and activities are developed and carried out independently, probably with duplications and omissions.

Without coordinated effort, the independent contributions of these specializations cannot be expected to maximally promote articulation.

Membership in the Vocational Education Family. Two of the major programs in Industrial Education are parts of the vocational education family. These two are Trade and Industrial Education and Technical Education. The family also includes Agriculture Education, Distributive Education, Home Economics Education (Gainful), Health Occupations Education, and Office and Business Occupations Education. All the family members have a common commitment to training for gainful employment.

Yet there are wide differences among family members. The subject matter content varies widely. Agriculture is based in the content of occupations concerned with the production and processing of foods and fibers. Health Occupations have subject matter based in the physical sciences and their applications to physiological and psychological care of people. Also, the degree of breadth versus specificity varies greatly. Trade and Industrial Education develops courses around specific occupations such as machinist and carpenter. Distributive Education courses are more broadly defined, for example, General Merchandise, Insurance, and Petroleum.

Summary. Before moving to the second part of this paper, a few summary statements are appropriate. Articulation is the continuous and efficient progress of students from grade to grade and from school to school. Marginal or poor articulation exists within Industrial Education, although the degree to which it exists is not quantified. Marginal articulation is created when programs do not adequately communicate and are not adequately coordinated. Communication and coordination are hindered by diversity in

Industrial Education, in the Vocational Education family, in the whole of public and non-public education, and in American Society.

PART II: VISUALIZATING AND ENHANCING ARTICULATION

The foregoing was intended to illustrate that Industrial Education today is marked by independent action on the part of many specializations working at several levels and at a plural number of sites. Clearly it is unrealistic to expect the ideal--a continuous flow of students in an efficient manner within the Industrial Education program. Nor can we expect a wholly fragmented one. In all probability, what we have is some degree of articulation which is presently undefined and which is being managed in less than a wholly systematic fashion. The remainder of this paper is a proposal on how the degree of articulation can be visualized. Coupled with this proposal on visualization are suggestions for enhancing articulation.

Three key questions. To begin the visualization, ask yourself three questions. What is the present level of articulation in Industrial Education? What factors support the present level of articulation and/or would facilitate a higher level of articulation? And, what factors are restraining further or improved articulation in Industrial Education? By looking at these factors as forces and raising these questions, you have begun a force field analysis.

Level of articulation. Before we can speak responsibly of improving the articulation in Industrial Education, an essential step must be taken. That step is to document the degree or level of articulation which presently exists.

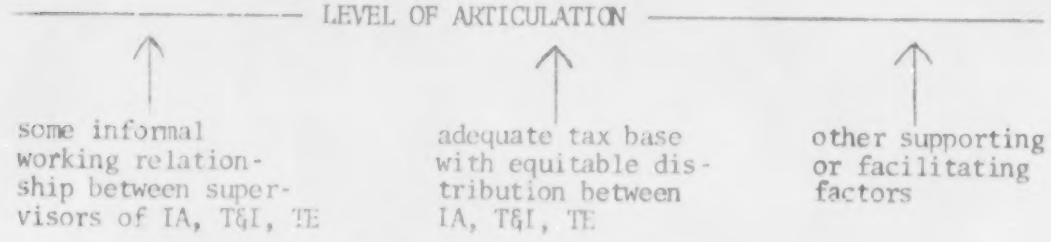
Try to picture the level of articulation as being represented by a horizontal line drawn on a chalk board. The line represents the present level of articulation and means things like "in my state a few junior high schools have Industrial Arts programs and only a few college-bound and early-employment students can explore industry," or "there are almost no Trade and Technical programs; these two programs are isolated from one another," or "in the high schools, the roles of Industrial Arts Education and of Trade and Industrial Education are moderately well distinguished and most of those enrolled in each program have knowingly and wisely elected the desired class," and "not only Technical Education but also Trade and Industrial Education and Industrial Arts Education are present in the community college; each program serves adults but there is much confusion about roles and target populations." As you can see, each quotation contains some positive information and some negative. We can almost always expect to find a mixture, that is, some effective and some ineffective articulation. Figure 1 is an illustration of how the level of articulation can be graphically represented.

Figure 1: Level of Articulation

A moderate number of Industrial Arts programs, mostly in junior high; vocational programs in various high schools established in the "popular" trades; community college programs in trades and technologies evidence little distinction between job opportunities.

Facilitating factors. To answer the second question, we look for factors in and around Industrial Education which are working for us to produce the present level of articulation. Perhaps the state supervisors of Industrial Arts, Trades and Industrial, and Technical Education are on the same staff or have an informal working relationship. Or, maybe the industrial teacher education institutions have been effective in preparing beginning teachers who understand and respect the roles and contributions of each specialization. Another possibility is that from an adequate tax base, a balanced expenditure pattern has developed a range of programs without the dangers of over or under emphasis. You can probably cite some other factors which support articulation in your state. Whatever the specific findings, the important point is that articulation exists because several identifiable influences are at work in positive ways. See Figure 2 for a graphical representation.

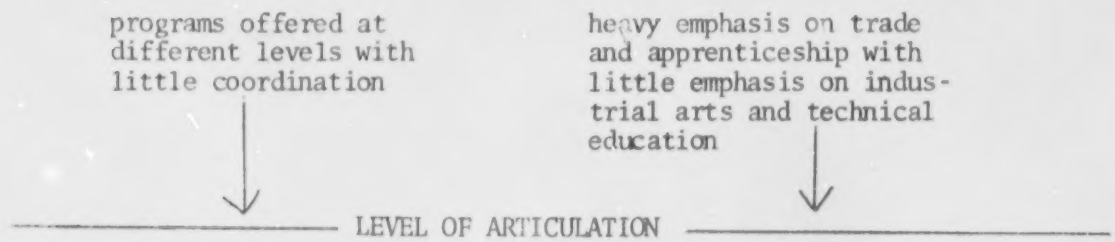
Figure 2: Supporting or Facilitating Factors Articulation


LEVEL OF ARTICULATION
some informal working relationship between supervisors of IA, T&I, TE
adequate tax base with equitable distribution between IA, T&I, TE
other supporting or facilitating factors

Restricting factors. Turning to the third question we ask, "What factors restrain further or improved articulation in Industrial Education?" As a source of influence, consider that Industrial Arts is a part of

general education while Trade and Industrial is a part of vocational education; both have been primarily focused on secondary students. Technical Education, on the other hand, is directed at post-secondary students. Thus, different philosophies, different target populations, and different educational sites may be influential barriers. Another potentially negative influence or barrier to articulation is likely to be found in uneven and/or inequitable funding patterns. In a different vein, there may be little contact between state supervision, local administration, classroom instruction, and support staff in research, curriculum, and teacher education. If little contact results in inadequate communication, then articulation is obstructed through limited data, biased information, or outright competition. Any of the foregoing, as well as numerous other factors, can be postulated as barriers to an increased level of articulation. See figure 3.

Figure 3: Inhibiting Factors to Articulation


programs offered at different levels with little coordination
heavy emphasis on trade and apprenticeship with little emphasis on industrial arts and technical education
LEVEL OF ARTICULATION

Raising the level of articulation. Since we desire that students progress more continuously and efficiently, we must do one of two things. We can try to increase the strength of one or more of the facilitating

forces. For example, an improved preservice teacher education effort could possibly add many new and well-prepared teachers to the field each year. Or, an active inservice program for both teachers and administrators could perhaps influence different agencies to communicate and cooperate.

The other course of action with several options is to remove barriers or forces which exert restrictive influence on articulation. Perhaps state or regional funding and evaluation practices promote, inadvertently, isolationism among both institutions at the various levels and the programs of Industrial Education. Or, a lack of information--career guidance and program availability--is inhibiting student choice. An extensive media program might be effective in bridging what appears to be a barrier but is actually a gap of knowledge.

Force field analysis is much more complex than presented here. A few key ideas can be summarized as follows.

A simple diagram can represent a present level of activity; the level is held at a relatively fixed position by a balance of forces--some pushing up, some pushing down. In this paper, the horizontal line represents the level of articulation. Arrows above the line which point down to it represent the barriers to improved or raised articulation. Arrows below the line which point up to it represent facilitating influences which support the articulation. To change the status, it is necessary to change the balance. While a common approach is to apply additional upward force, many experts suggest that a more lasting method is to remove barriers.

CHAPTER III: RESULTS OF THE CONFERENCE

STAFF EVALUATION OF THE CONFERENCE

The National Conference for Trade and Industrial Education was attended by 162 trade and industrial education teachers and administrators from 37 states, the District of Columbia, and the Virgin Islands. The participants listened to presentations on fifteen critical T & I issues, and participated in workshops led by 19 consultants. In addition, 10 conference staff members assisted states in planning workshops.

Each of the participants was nominated for involvement in the conference based upon their past reputation as a "prime mover" for T & I education in their state. Participants gathered pre-conference data, within their own states to determine issues with implications for changes in pre-service and in-service preparation of T & I professionals. A total of 499 T & I educators were involved in this pre-conference data collection. These educators have thus set up a communications network nationally, within each U.S.O.E. Region, and within each participating state. Each state's communications network may be used to aid in implementing needed changes in their state's professional development activities.

Each state change agent team set objectives and planned specific implementation steps for changes in professional development activities. Figure III-1 is a summary example of the plans generated by each state.

Conference participants completed an evaluation of the conference. Figure III-2 is a summary of participants' evaluation of the conference presentations and workshops. Figure III-3 is a summary of participants' evaluations of conference facilities, support services, staff, and general program.

Due to limitations on time and funding, no post-conference evaluation of plan implementation within states will be undertaken.

Figure III-1

RECOMMENDED TIME LINE FOR IMPLEMENTATION OF STATE ARTICULATED PROGRAM FOR INDUSTRIAL EDUCATION 1975 - 1981

FOR THE STATE OF XXXXXXXXX

Nov. '75	State Committee Selected		
Dec. '75	Interviews of Key Industrial Educators		
Jan. '76	National Conf. for Trade & Industrial Educ. Professional Development	Sept. '77	Endorsement of Master Plan by State Board of Education.
Feb. '76	State Committee Writes Recommendations	Oct. '77 - Oct. '78	Creation of Special Task Committees and Develop Articulated Models. Regional Inservice Workshops, Task Committees, Report to Steering Committees of Progress at Regular Intervals.
Mar. '76	Committee Recommendation Submitted to State Director of Voc. Education	Nov. '78 - June '79	Steering Committees Create Additional Task Committees as Needed to Develop Specific Models and Field Testing of Developed Models. Regional Inservice Workshops. Report to Steering Committee on Field Tested Models.
Apr. '76	Steering Committee Selection	June '79 - June '80	Further Field Test of Models with Steering Committee Review. Regional Inservice Workshops.
May '76	Steering Committee Meeting		
July '76 - June '77	Steering Committee Meetings to Develop Master Plan for I.E.	July '80 - June 81	Steering Committee Develops Final Report.
	Regional Inservice Workshops	Sept. 81	Report Goes to State Board of Education for Adoption.

Figure III-2

CONFERENCE PARTICIPANTS' EVALUATIONS OF PRESENTATIONS AND WORKSHOPS

STATEMENT	Mean	Standard Dev.	N
17. Keynote: "Identification & Clarification of the Objectives of T & I Education" Dr. Byrl Shoemaker	4.3	.9	111
18. "Systems Design in Educational Planning" Dr. Orville Nelson	3.5	.7	111
19. "Key Results Area Planning" Zenon Smolarek	3.7	.7	111
20. "Maintaining T & I Credibility with Industry, Labor, and Legislative Bodies" Dr. Mel Barlow, Lowell Burkett, Dr. Byrl Shoemaker, Dr. John Walsh, Dr. Chet Francke, Merlin Taylor	3.7	1.0	111
21. "Leading Groups" Ray Hansen	3.9	.7	111
22. "Power and People" Dr. Jerry Coomer	4.1	.8	111
23. "Individual Performance Planning for Implementation" Dr. Jerry Coomer	3.8	.8	111
24. "Principles of Effective Leadership for Vocational Youth Organizations	4.7	.5	58
25. "Key to Success: Evaluation" Dr. Franklin King	4.3	.7	55
26. "Professional Development & Management Training for Teaching & Administrative Personnel" Dr. Charles Hopkins	4.3	.7	46
27. "Development & Implementation of a Coordinated Program of I.A. & T & I Mr. Lawrence Foth	3.6	1.1	30
28. "Psychological Skills & Work Attitudes Needed by Effective T & I Teachers in the Year 1979" Dr. George Mannen	2.9	1.1	31
29. "Competency Based Teacher Education" Dr. Robert Andreyka	4.1	.8	51
30. "Teacher Awareness of Standards: Nationwide Consistency of Policies and Standards" Robert Childers	3.7	1.0	38
31. "Articulation in Industrial Education" Robert D. Sartin	3.9	1.2	28

Ratings: 1= Totally useless or too simple
2 = Mostly inapplicable or outdated
3 = Some yes, some no
4 = Applicable
5 = Very applicable

Figure III-3

CONFERENCE PARTICIPANTS' EVALUATION
OF FACILITIES, SUPPORT SERVICES, STAFF, AND GENERAL PROGRAM

	STATEMENT	Mean	Standard Dev.	N
1.	Sufficient work space was provided for each participant	4.5	.5	111
2.	More supplies and materials should have been provided	2.6	1.1	111
3.	Motel arrangements were satisfactory	3.2	1.3	111
4.	The content of the seminar was relevant	4.1	.7	111
5.	More content could have been included	2.8	1.2	111
6.	The topics in the program fit together to make a coherent program	3.9	.7	111
7.	The seminar schedule of activities was well designed	3.8	.8	111
8.	The instructional materials facilitated learning	3.9	.6	111
9.	There was sufficient opportunity for individualized duscussions with the presenters and staff consultants	3.4	1.1	111
10.	There was a lack of group interaction	2.4	1.1	111
11.	The topic presenters had a thorough knowledge of their topics	4.2	.6	111
12.	The Stout conference staff was courteous and helpful to the participants	4.5	.6	111
13.	The Stout conference staff was well organized	4.2	.8	111
14.	I experienced teaching techniques which were new to me	2.8	1.1	111
15.	The food was very good	3.2	1.1	111
16.	In general, presentations were difficult to understand	1.8	.6	111

Ratings: 1 = SD = Strongly Disagree
2 = D = Disagree
3 = U = Uncertain
4 = A = Agree
5 = SA = Strongly Agree

APPENDIX A: PLANNING COMMITTEE INFORMATION

Item 1: List of Planning Committee Members..... A- 2

Item 2: Planning Committee Member Invitation Letter..... A- 5

Item 3: Planning Meeting Letter..... A- 7

Item 4: Summary of Selected T & I Problem Areas..... A- 9

Item 5: Planning Interview Form..... A-12

Item 6: Planning Meeting Agenda..... A-15

Item 7: Planning Committee Follow-up Letter..... A-17

Item 8: Summary of Planning Meeting..... A-19

Item 9: Sectional Topic Listing..... A-23

Appendix A
Item 1

"Planning Committee"
National Conference for
Trade & Industrial Professional Personnel

Region I	Donald E. Graves Superintendent-Director, South Easton Regional Vocational Technical School 250 Foundery Street South Easton, Mass. 02375
Region II	Donald R. Hoak Director, Vocational Education & Extension Board 200 Stonehinge Lane Carle Place, New York 11514
Region III	Edward P. Tangman Supervisor, Trade & Industrial Education Washington D.C. School System 770 Kenyor Street Room 12 Washington, D.C. 20010
Region IV	Dr. Durwin Hanson Chairman, Industrial Education Department North Carolina State University Raleigh, N.C. 27607
Region V	Arnie Potthast Chief, Trade & Industrial Education Bureau of Program Development Wisconsin Board of VTAE Hill Farms State Office Building, 7th Floor 4802 Sheboygan Avenue Madison, Wi. 53702
Region VI	Robert Patterson Director, Vocational-Industrial Ed. Division Texas Education Agency Austin, Tex. 78701

Region VII	Dr. Harlan Geise Executive Director, Iowa Career Ed. Advisory Council Executive Hills Des Moines, Iowa 50319
Region VIII	Odin Stutrude Director, Vocational Education Division North Dakota State School of Science Wahpeton, N.D. 58075
Region IX	Dr. James Herman Chief, Bureau of Industrial Education State Department of Education State Education Building 721 Capitol Mall Sacremento, Calif. 95814
Region X	Robert Schroedel Instructor & President State T & I Group Olympia Community College Olympia, Washington 98501
Labor	John Schmitt President, Wis. AFL-CIO 6333 West Bluemound Road Milwaukee, Wi. 53213
Management	Frank Primeau Manager, Owner Services American Motors Corp. 14250 Plymouth Road Detroit, Mich. 48232
USOE	William A. Dennis Educational Program Specialist State Programs & Services Branch U.S. Office of Education Division of Vocational & Technical Education Room 5110, ROB #3 7th and "D" Street, S.W. Washington, D.C. 20202
USOE Region V	Chuck Jaymes Program Specialist Vocational & Technical Education U.S. Office of Education, Region V 300 South Wacker Drive, 32nd Floor Chicago, Ill. 60606

Planning Meeting, Host State	Ron Johnson Supervisor, Industrial Education State of Minnesota Department of Education Capitol Square 550 Cedar Street St. Paul, Minnesota 55101
A.V.A. T & I Division	Dr. John Walsh, President Dunwoody Industrial Institute 818 Wayzata Boulevard Minneapolis, Minnesota 55403
Project Director	Ray Hansen CVTAE, 237 Sci. & Tech. Bldg. University of Wisconsin - Stout Menomonie, Wisconsin 54751

Appendix A
Item 2

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

August 14, 1975

Dear

To follow up our phone conversation of , this letter is to formally invite you to serve on the Planning Committee for the National Conference for Trade and Industrial Education Professional Personnel. You were nominated as a person with widely recognized Trade and Industry expertise who would be able to represent the interests of

The Planning Committee will be composed of ten persons, covering each USOE region, a management representative, a labor representative, Bill Dennis for the USOE, Chuck Jaymes from the USOE Region V office, and myself as project director.

It will be the responsibility of the committee to complete preliminary planning for a three day conference for approximately 250 Trade and Industry professionals. Specially, the committee will be responsible for:

1. publication of the conference informally in their respective regions
2. selection of participants for their region
3. selection of conference dates and location
4. preliminary screening of critical T & I problems
5. nomination of some topic presenters.

Enclosed is a copy of the projects goals and objectives. To facilitate delivery of these results, we envision four different types of activities that conference participants will engage in. These activities are as follows:

1. Pre-conference data collection to enable state planning.
2. Conference Day 1 - State and regional planning for critical personnel development needs in T & I.
3. Conference Day 2 - Sectional presentations on selected critical topics.
4. Conference Day 3 - Change agent training for implementation of changes in professional development activities.

You will be receiving some additional materials to aid you in preparing for the planning meeting. You can expect these materials, along with the meeting agenda, to arrive during the week of September 1, 1975.

The Planning Committee will meet at the Ramada Inn, 4200 West 78th, in Minneapolis, Minnesota. The meeting will start at 1:30 p.m. on September 11th, and will end at 12:00 noon on September 12th to facilitate travel arrangements. Your travel, food, and lodging will be covered by the project. A room has been reserved in your name at the Ramada Inn for the night of the 11th. Let me know if your travel arrangements necessitate an additional nights loding, and I will make the reservation for you.

, thank you for accepting the responsibility of representing your region on this planning committee.

Sincerely yours,

Ray Hansen
Project Director
National Conference for Trade
and Industrial Education Professional
Personnel

Enc.

jvh

Appendix A
Item 3

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

September 4, 1975

Dear

The T & I Conference Planning meeting agenda for September 11 and 12 is enclosed. As I promised in my letter of August 14, here are the materials to aid you in preparing for the meeting. In terms of completing all five planning committee responsibilities during that meeting, I would suggest meeting preparation as follows:

Responsibility #1 - Publication of conference informally in your region. This can be done in two ways. First, by contacting selected key people in each state of your region, prior to the planning meeting, to get input on each of the next four planning committee responsibilities. Secondly, once the planning committee has met, normal word of mouth publication of the conference in your day to day professional contacts.

Responsibility #2 - Selection of participants from your region. Although all states will send four participants (teacher, teacher educator, state staff person, and coordinator/supervisor), states may wish to identify participants in their own way. If you could contact the state director from each state in your region to gain their input on participant selection, we should have all of the data that we need on this.

Responsibility #3 - Selection of conference dates and location. We have tentatively reserved rooms at the Royal Inn in Anaheim, California for December 2 - 4. This is just prior to the start of AVA. This was selected as a tentative time and place to enable participants to get double benefit from their travel expenditures. However, the west coast location may not be desireable as it places a disproportionale travel burden upon participants from east coast states. Could you get some feedback from T & I personnel in your region on this, and suggestions for alternative dates and location if they feel that Anaheim is not good.

Responsibility #4 & 5 - Preliminary screening of critical T & I problems and nomination of some topic presenters. Although conference participants will also be involved in topic selection, I would like to provide them with a list of topics to start with. As you are contacting people from the states in your region, ask them for any critical T & I problems. We are particularly interested in problems that have implications for professional development activities in their state. A summary of past T & I conference topics is enclosed for your reference.

In order to aid you in gaining input from your region on these items, I have enclosed a structured three page form for you to fill in your notes prior to the planning committee meeting. The form also has space to add thoughts that occur during the meeting. I will collect these forms following the meeting to be sure that I have all of the planning committee input for the conference.

When you arrive at the airport in Minneapolis, you can obtain free limousine service to the Ramada Inn by calling them on their phone located by the baggage pick up area. Your room has be reserved in your own name.

Sincerely yours,

Ray Hansen
Project Director,
National Conference for Trade
and Industrial Education
Professional Personnel

Enc.

jvh

Appendix A
Item 4

Summary of Selected T & I Problem Areas

A. National Conference on Trade and Industrial Education

Kansas City, Missouri, May 1968

The conference was planned to devote a major portion of time to an analysis of nine problem areas.

*1. An improved Teacher Education program to meet the growth needs for T & I Education services

2. A well defined, coordinated, and directed program of research to meet the needs of T & I Education in an expanding economy.

3. Top quality T & I programs: The specifications and how to meet them.

4. Measuring the effectiveness of T & I programs.

5. The challenge for Trade and Industrial Education to persons with special needs.

6. Current and projected curriculum needs in Trade and Industrial Education.

7. Vocational Industrial Clubs of America - A new dimension responsibility for every T & I Educator.

*8. Keeping T & I programs current with Trade practices and the requirements of industry.

9. Expanding Trade and Industrial Education services through Cooperative Training programs.

B. Consultants Panel to DVTE/USOE - April 1970

Eleven major areas of concern were identified as:

1. Correlation of Curriculum planning and development.

*2. Vocational Industrial Technical Teacher Training.

*3. Administrative leadership development.

*Problem areas with direct implications for professional development activities.

*4. Certification of professional personnel.

5. Cooperative Vocational Industrial Education.

6. Advisory Committees for Trade and Industrial Education.

7. Coordination of human resources.

*8. Research and training.

9. Youth organizations.

10. Program evaluation.

11. Accreditation of Vocational Technical Education.

C. National Conference on Trade and Industrial Education

Arlington, Va., October 1971

Eight tenents for action were established in the following areas:

1. The scope of Trade and Industrial Education. This provided a realistic definition and established the parameters of the program.

2. The role of Trade and Industrial Education in Career Education. Establishes a blending of T & I programs with other segments of education to meet the goals of Career Education.

*3. Meeting the needs in Teacher Education.

4. The Development of Youth Organizations.

5. Meeting the needs of People in Target Groups.

6. Utilizing On-The-Job Training in Trade and Industry.

7. Meeting Labor Market Needs.

8. Advisory Committees for T & I Programs.

D. T & I Education

Paper prepared for 4/74 congressional oversight hearing by Bill Dennis.

*1. Projected needs for T & I teachers in "79" will call for preparation of approximately twice as many teachers as existed in "72".

*Problem areas with direct implications for professional development activities.

*2. Articulation between all agencies preparing T & I teachers is a problem.

*3. Comprehensive state planning called for under title X of Educational Amendments of 1972 (PL 92-318) is not yet fully operational.

E. In preparation for a National Conference for Trade and Industrial Education the Division of Vocational and Technical Education, Bureau of Occupational and Adult Education, U.S. Office of Education, convened an Ad Hoc Planning Committee which met in Washington, D.C. on April 16 and 17, 1975 to identify problem areas.

Two major critical problems and eleven breakout priority items were identified.

Critical Problem Areas:

1. To identify and clarify the objectives of Trade and Industrial Education.

*2. To improve the planning mechanism to address needs, including National, State, and local priorities (Comprehensive Planning).

Priority Areas:

*1. Teacher Preparation.

*2. Leadership Development.

3. Follow through (while student is still in school) Placement and Follow-up.

*4. Credentialing and Certification.

5. Instructional Materials.

6. Evaluation and Accountability.

7. Student Development Activities.

8. Role of Labor and Management and Public Involvement.

9. Collection and Use of Data.

*10. Administrative Structures for Effective Program Implementation.

11. Target Areas.

*Problem areas with direct implications for professional development activities.

Appendix A
Item 5

PLANNING COMMITTEE NOTES FOR_____

National Trade and Industry Education Professional Development Conference

This form is designed to aid you in making a telephone survey of key individuals from each state in your region. Such a survey will serve the purpose of creating initial awareness of the national conference and will also provide representative planning committee input for your region. The project will reimburse you for any phone costs that you incur. This form should be hand written in somewhat legible fashion so that we can collect it following the planning meeting.

CRITICAL ISSUES IN TRADE AND INDUSTRY EDUCATION
WITH IMPLICATIONS FOR PROFESSIONAL DEVELOPMENT

Person Contacted Title State Opinion Concerning Conference Dates & Location	Critical Problem Issues	Type of Issue: Administrative	Teaching	Technical	Leadership & Change Agent

Person Contacted Title State Opinion Concerning Conference Dates & Location	Critical Problem Issues	Type of Issue Administrative	Teaching	Technical	Leadership & Change Agent

Suggested Resource Persons For Critical Issues

Participant Selection Suggestions For Each State In Your Region

Use The Remaining Space For Your Own Planning Committee Meeting Notes

Appendix A
Item 6

PLANNING COMMITTEE AGENDA

National T & I Education Professional Development Conference

Ramada Inn
4200 West 78th Street
Minneapolis, Minnesota 55435

Meeting Room: "Executive First Cabin"

September 11, 1975

1:00 p.m. Check in - get orientated

1:30 p.m. Introduction of Planning Committee

2:00 p.m. Summary of Conference Objectives and Skeleton Structure

2:20 p.m. Critical T & I Problem Issues - Brainstorming

- Objective: Obtain as comprehensive a list as possible

3:00 p.m. Coffee - stretch break

3:15 p.m. Screen List and Nominate Resource Persons

- Objectives:

1. select issues of widest concern
2. select issues with implications for professional development
3. nominate resource persons with pulling power

5:00 p.m. Cocktails and Dinner

(Dinner will be served in our meeting room)

6:30 p.m. Review and Select Leadership Change Agent Topics

- Objectives:

1. select topics of greatest utility
2. select topics with appeal due to participant involvement

9:00 p.m. Meeting adjourn for the evening

September 12, 1975

7:45 a.m. Breakfast will be served in our meeting room

8:30 a.m. Conference Location and Dates - Discussion

- Objectives:
  1. maximum participation
  2. implementation of appropriate professional development changes
  3. lowest travel cost

10:15 a.m. Coffee Break

10:30 a.m. Participant Selection Approaches - Discussion

- Objectives: Participants selected should have the power and drive to implement professional development changes
- T & I Instructor
- Coordinator/Supervisor
- Teacher educator
- State staff member
- Industrial representation ?
- Labor representation ?

12:00 Meeting adjourn

Appendix A
Item 7

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

September 22, 1975

Dear

Thanks for the work that you did prior to and during our T & I Planning Committee meeting. Your professional expertise and participation resulted in successful accomplishment of our planning objectives.

You will be interested to learn that Bob Patterson was able to obtain facilities for our conference in Dallas. We will meet at the Royal Coach Motor Hotel. As soon as I receive copies of their advertising brochure, I will forward one to you.

Enclosed are the minutes from the meeting, along with summaries of eleven critical topic areas that will be used for sectionals at the national conference. Would you please review the eleven topics and add or delete descriptive material within the topics as you see fit. We will then use the topic descriptions to provide orientation to topic presenters.

Following the topic summaries, you will find several names that have been nominated for presentations. If you have had contact with these people, please note your feelings about their delivery styles. We want to get presenters that "do their homework" in a professional fashion, and also can deliver material in an enthusiastic manner. I would appreciate any additional nominations. If you possess complete addresses or phone numbers for any of the topic nominees, please pencil them in. A stamped self-addressed envelope is provided for you to return the topic summaries with your notations!

Bill Dennis and I have discussed final participant selection procedures and would like to request your assistance with the first informal step in the selection process. To that end the steps are listed on the following page.

STEP 1. Sept. 23-30 Planning committee member contacts state T & I supervisor/ consultant for each state in his region to provide the following information as an informal conference announcement.

1. Conference objectives.
2. Conference dates and location.
3. Indicate that a formal conference announcement will be sent to the state director from USOE. This announcement will request the directors support of the conference and will ask him to select four candidates to be invited to the conference.
4. Ask the T & I supervisor to confer informally with the state director on candidate selections. These candidates should be "prime movers" in professional development activities for T & I within the state. Such as:
   - a T & I teacher
   - a T & I coordinator/supervisor
   - a state staff person
   - a teacher educator

   Two alternative candidates should also be named in the event that a candidate can not accept the invitation.

STEP 2. Oct. 1 Announcement of conference sent by USOE to state directors. This announcement will be accompanied by a conference agenda.

STEP 3. By Oct. 15 Candidate names forwarded to Ray Hansen. Formal invitation sent out by University of Wisconsin-Stout as names are received.

, I will be phoning you to see if you anticipate any difficulty with STEP 1 in the states in your region. Any phone charges incurred by you will be reimbursed by the project.

Sincerely yours,

Ray Hansen
Project Director,
National Conference for
Trade and Industrial Education
Professional Personnel

kj

Enclosure

Appendix A
Item 8

Summary From T & I Planning Committee Meeting

Meeting Date:
9/11-12/75

Meeting Location:
Ramada Inn - Minneapolis, Minn.

Meeting Participants: Planning Committee Members with the exception of Dr. Jim Herman, Region 10, and John Schmitt, Labor Representative. Additional Planning Committee Members were:

From Host State: Ron Johnson
Representative of AVA: T & I Division: Dr. John Walsh

Dr. Jerry Coomer and Dr. Harold Halfin of the University of Wisconsin - Stout staff were present as observers.

Meeting Objectives: This meeting had six major objectives as follows:

1. To review the project goals and objectives and tentative format of the conference.
2. To generate initial critical issues that would have relevancy to all of the states for the national conference.
3. To nominate potential research consultants and presenters for critical issues.
4. To review thirteen mid-management leadership sectional topics, based upon the Wisconsin Trade and Industry Leader Development Conference of 1975. Planning committee members were to identify those topics from that conference that would have applicability for the entire nation.
5. To select a date and place for the National T & I Conference.
6. To identify the selection procedures that would be used for selection of conference participants.

Objective #1: The project goals and objectives were reviewed by the planning committee. Two main points were emphasized. First, the project would select critical issues in Trade and Industry Education with implications for professional development activities for both teachers and middle management personnel. Secondly, the conference would focus on easing the implementation of the professional development changes through the use of extensive pre-conference participant involvement and several change agent "topics" as a formal part of the conference program.

Objective #2: The planning committee utilized the brainstorming process to brainstorm 57 topics of current national concern in T & I. The resources that the planning committee used for development of these topics involved a summary of past topics utilized in former T & I conferences plus interview data that each planning committee generated prior to the planning committee. Once topics were generated they were screened to identify topics that would have widest concern nationwide and secondly, to select issues with direct implications for professional development. Thirteen broad issues were screened from the overall topic list. These thirteen issues were then consolidated to arrive at a final list of eleven critical issues with professional development implications in T & I education. The eleven critical issues are summarized following this report.

Objective #3: Six resource persons were nominated as topic presenters or consultants on the eleven critical issues. The planning committee will submit additional names and additional names will also be sought from conference participants.

Objective #4: Thirteen leadership change agent topics were reviewed by the planning committee. It was agreed that four of these topics would be used with involvement exercises for all conference participants. These topics are: 1. group dynamics and leadership, 2. sources of power and influence, 3. administrative trust dilemma, 4. administrative planning. In addition, the planning committee indicated that additional topics from the list of thirteen change agent topics should be inserted if the conference format permits it. Two topics were nominated for insertion depending upon the level of ability of the participants. These were "interactive communication" and "plan, organize, direct, control."

The topic names for the four major topics should be changed and reworded in the conference announcement so that the wording is more applicable to administrative development in vocational education. Announcement wording will be worked out between Bill Dennis, Chuck Jaymes and Ray Hansen.

Objective #5: Conference location and dates were reviewed based upon data obtained through phone interviews by the planning committee. The tentative conference date and location just prior to AVA was discussed at length. Both pro and con issues developed. The result of this discussion made it appear that the advantages were pretty well equal to the disadvantages and the states in favor of the location were pretty well balanced off by the states against the location. To resolve the conflict the planning committee generated an alternative date and location. The alternative date selected was during the week of January 12. Three alternative locations were established in priority order. These were, Dallas, Denver, and Kansas City. A fourth location at Memphis was discussed but was not included in the final motion. Following generation of the alternate location and date the planning committee voted to determine whether we would select the alternate or go with the original Anaheim location and date. There were eleven votes for the alternate with the industrial representative abstaining, U.S. Office of Education members abstaining and project director abstaining. No votes were cast for the Anaheim location. It appeared from the discussion that the Anaheim location was not entirely negative but the main point in voting for an alternative location was summarized in a statement made by one of the planning committee members. That was, "trade and industry should stand on it's own in this conference and not ride along on the shirt tails of another group."

Objective #6: Participants selection approaches were discussed based upon one major point. That was, that each state's participants should be "prime movers". That is, participants should be selected based upon their existing track record so that they will have the power and drive to implement needed changes in professional development activities.

Labor and industrial representation was discussed and two main points were brought out. 1. Extensive pre-conference activities in each state

should include labor and industrial representation. 2. Some labor and industrial representatives should attend the three day conference as sectional presenters.

Four designated state participants should attend by invitation. These should include: 1. T & I teacher, 2. T & I coordinator/supervisor, 3. a T & I state staff person and 4. a T & I teacher educator. In addition, each state should have one floating allocation that the state participants can use to invite a key person from their state. This key person might be a legislator, a trade union participant, an industrial participant, or even another T & I professional whose input would be critical for implementation of changes.

It was agreed that the planning committee can attend the three day conference, in addition to the designated representatives on their state's team.

Actual selection of the participants to be invited should involve the state director in each state for their nominations of participants. It was recognized that in many cases the state director would pass this on to somebody else in the state, but it was agreed that the formal contact should be made with the state director. This contact will come through the U.S. Office of Education, the Regional U.S. Office for the states region, or planning committee members as appropriate. Following initial contact and nomination of participants a formal letter of invitation will be sent to each potential participant on U.S. Office of Education stationary. In addition, a tentative conference agenda and informational letter will be sent on Stout stationary. Copies of both letters will go to the state director, the T & I state supervisor, and the planning committee member for the state that the participant is from.

A major point was made concerning funding of participants travel expenses for the national conference. State EPDA funds may be used for these travel expenses. A statement to this effect will be drafted by Bill Dennis for insertion in the conference announcement.

Post-Conference Details:

1. The eleven critical issues will be edited and sent to all planning committee members for review. All other brainstorm issues will also be summarized and sent for review to the planning committee.
2. Planning committee representatives from the regions selected as alternate conference locations will assist the project director in liaison with potential locations. The Dallas location will be explored first through Bob Patterson. If this location does not work out, Odin Stutrud will assist in exploring the Denver location and Harlyn Geise will assist in exploring the Kansas City location for suitable facilities for the conference.
3. A tentative conference agenda including the eleven critical professional development issues plus the four leadership change agent skill issues will be developed for utilization in the conference announcement. Ray Hansen will develop the agenda and work cooperatively with Bill Dennis to finalize the wording on the conference announcement.

4. The edited list of critical professional development issues will be summarized into a structured interview format that conference participants will be able to use in screening for further issues in their own state. The structured interview format will thus become the vehicle for participants to use in data gathering for their state systems design of critical professional development needs.
5. Planning committee regional representatives will assist informally in the participant selection process for states in their respective regions. Members will also publicize the conference through their day to day professional contacts.

Appendix A
Item 9

SECTIONAL TOPICS

1. "Psychological Skills and Work Attitudes Needed by Effective T & I Teachers in the Year 1980."

Emphasis will be placed by 1980, upon mainstreaming disadvantaged and handicapped persons in the same classes with "normal" persons. The T & I instructor will be responsible for serving persons with a broader spectrum of abilities, vastly different behavioral patterns, and widely divergent learning rates. In order to be effective in these new instructional situations, the T & I teacher-humanist will need to utilize psychological skills to motivate students, and provide co- and extra curricular activities to foster the students' personal growth and subject area growth. These increasing demands will occur during a period when the education profession is moving toward a concept of "more pay for less work". What are the implications of these developments upon pre-service, in-service, and in-house staff development?

2. "Keeping T & I Instruction Current With Industry."

Arrangements must be made to allow a trade and industrial instructor an opportunity to return to the trade periodically. This will allow him to renew skills that have been lost during his years in the classroom, and to develop familiarity with new equipment and processes.

Presenter: Wayne Boeks
900 East Blvd.
Bismark, North Dakota

3. "Competency Based Teacher Education."

The identification of those competencies that each teacher should possess is of the highest priority to assure that teacher education programs are relevant to professional development and attainment.

The vocational T & I teacher is presumed to have the trade skills and related knowledge which can and should be verified by a competency examination.

Therefore, the preparation of an individual to assure the development of teaching methods, educational attitudes, psychological technique, and interdisciplinary awareness must be planned through the process of professional development experiences.

4. "Professional Development and Management Training for Teaching and Administrative Personnel."

A need appears to exist for greater concentration of effort and understanding in these areas. Professional development is not viewed as "taking undergraduate and graduate credit courses" but rather as establishing high quality values and standards of ethics and personal relationships within the profession. Management training would involve exploring some procedures and techniques critical to the leadership function.

5. "Teacher Awareness of Standards: Nationwide Consistency of Standards."

5a. Certification

Methods and Procedures for Articulation of Professional Certification of T & I Instructors Among States, Delivery Systems and Schools.

1. To ensure the same high level of teaching proficiency and trade-related skills among all instructors involved in preparing a student for entry into the job market.

2. To provide standards for evaluating teaching background and courses and for assessing "on the job experience" as it may or may not qualify the potential instructor;

3. To eliminate the multitude of different standards of certification that now exist from school to school, delivery system to delivery system and state to state within our national system, thereby guaranteeing the same high quality instructor to all vocational students;

4. To simplify movement of instructors and students from one school to another, and

5. To raise the professional image and self esteem of the T & I vocational instructor.

5b. Curriculum

Methods and Procedures for Articulation of Curriculum to Include the Communicating of Competencies From Industry to School to Industry, and Among States, Delivery Systems and Schools.

1. To ensure the same level of proficiency of job candidates to industry;

2. To provide standards for evaluating students as they progress through various delivery systems on their route to the final customer, industry;

3. To eliminate the lost time and drop out students generated by the systems that presently devise curricula that have little in common except their autonomy,

4. To enable students to move from one school or delivery system or state to another with some degree of continuity in their program;

5. To utilize and maximize successful methods and approaches of one school by making them available to all;

6. To best capitalize on contributions to the curriculum by industry;

7. To ensure that curriculum does reflect the needs of industry rather than the oft-times mistaken ideology of the individual, and

8. To encourage and strengthen communications between instructors in a like discipline.

5c. Job Entry Level Standards

Identification of Task Proficiency Based on Clear Cut Performance Competencies as Defined by Industry.

1. To enable student to progress with least amount of lost/repeated time;

2. To ensure that a student has those skills that industry requires;

3. To ensure instructors' and students' time is concentrated on the acquisition of saleable skills;

4. To provide practical test instruments to determine status in movement from industrial arts to vocational programs, from secondary to post-secondary programs, and finally to the ultimate consumer, industry;

5. To make possible the standardization of curriculum within a discipline, and

6. To further upgrade the professional stature of the student, the instructor, the school, the state and the T & I program in this country.

6. "Key to Success: Evaluation."

In the competition for the availability of public dollars to conduct viable trade and industrial education programs the effective vocational educator must be concerned with the dollar implications of the delivery of this educational service. The T & I educator (teacher, supervisor, administrator) must orient themselves to the intricacies of the formative

and summative evaluation process. This evaluation process must reflect the overall resolution of broad societal needs while at the same time meeting individual (students) wants and expectations. At the same time, the educational system must review the process from the stand point of effective cost management which address both cost efficiency and cost effectiveness.

7. "Articulation in Industrial Education."

The role of both secondary and post-secondary T & I is to meet the students' educational needs at whatever grade level the student should happen to be. Institutions, therefore, must provide a smoothly flowing continuing curriculum which is flexible to the degree that instruction can take place at the student's pace. This topic should address articulation and personalized instruction.

8. "Development and Implementation of a Coordinated Program of I.A. & T.I."

Industrial Arts is now approved for funding under the Federal Acts Administration, teacher educators and teachers must be made aware of the problems that exist in funding programs and relating the programs to trade and industrial education. Professional development activities must be developed to assist the states in establishing adequate administration structure to insure that a coordinated program of I.A. & T.I. will evolve.

9. "Effective Planning of In-Service Programs."

Develop and establish a format identifying the factors involved in formulating and conducting an in-service program. The format should take into consideration:

1. The reason and basis for the in-service.
2. The objectives.
3. The schedule and extent of participant involvement.
4. Identification of approaches for effective presentations.
5. Utilization of outside resource people in material and evaluation.
6. Provisions for developing leadership within the group.
7. Involvement of participants in planning and identifying needs.
8. Checking relevancy between content and objectives.
9. Recording reactions, recommendations, procedures and minutes.

10. "Identification and Clarification of the Objectives of T & I Education."

The objectives should identify the mission, function, and program standards as related to professional development. The objectives may also be directed toward comprehensive planning to address priorities at the national, state, and local level. Comprehensive planning may include:

1. Data collection, planning and development.
2. Implementation strategies and activities.
3. Evaluation (fiscal and program) for accountability.
4. Manpower needs.
5. Professional associations.
6. Apprenticeship: Industrial Arts; CETA
7. Private sector.
8. Inner cities; urban; suburban; rural.
9. Inter and Intra-governmental agencies (ie. Employment Security Commission).
10. Collective bargaining.
11. Population mobility.

11. "Principles of Effective Leadership for Vocational Youth Organizations."

A. A System of Management Based on an Understanding of Human Motivation

1. Theories of the self-concept.
2. Understanding identity.
3. Human relations and stimulation.
4. Personal motivation.
5. Maintaining a leader attitude.

B. Using the Youth Club as Delivery Vehicle for Personal Growth

1. Setting definable goals.
2. Personal growth through the career achievement program.

3. The outstanding club program as an organizational guide for club management.

4. The safety program as a system within the curriculum.

5. Contests.

C. Integration of the Youth Program Into a Regular Vocational Curriculum

D. Serving Student Affecting Education Through a Planned Approach to Lesson Plan Development

1. Understanding the group process.

2. Communication.

3. Human relations.

4. Self-awareness.

5. Values and value clarification.

6. Self-esteem (personal pride).

7. Goals and goal setting.

8. Problem solving.

9. Self-discipline and control.

10. Personal motivation.

COMPLETE LISTING OF ALL BRAINSTORMED TOPICS

-Industrial research - - - - instructional content.
-Commercially available individualized instructional material.
-Contact between local employer and school program.
*-Versatility of staff to include all user groups.
-Instructor selection of appropriate methodology - teacher ability and student learning styles.
*-Keeping teacher content skill current.
-Programs operated within school and cooperating industry.
*-Competency based teacher education program.
*-Professional development of teachers, teacher educators, coordinators, and supervisors. (includes mid management level in education)
-Competencies of students.
-Educating the teacher educator.
-An improved teacher education program to meet the growth needs for T & I services.
-Administrative leadership development.
-Certification of professional personnel.
-Commonality of modular instructional units.
-Professional development/certification for state staff.
-Re-evolvement of T & I as a discipline area.
-"Togetherness" - T & I like agriculture does:
    -By area (electronics)
    -Series of regional conference (1/year)
    -National conference every 5 years
    -Take the bull by the horns and do it!
-Comprehensive plan to include I.A. and apprentice with T & I and career education.
-T & I teacher relates his area to all other subject areas.
-Open shop states - employment not a part of the bargaining agreement.
-Development of alternative outcomes for the T & I student.
-Politicalization of teacher as it relates to T & I:
    -Decisions research based and moral judgement
    -Administrative control through certification
    -Realization of the process of change - the teacher is a change agent in and out of the classroom.
    -T & I in competition with whole series of societal needs (administration policy and procedure - national and state legislature)
    -I. D. of issues
    -Strategy to effect change (safety mandates)
Review of past vocational legislation shows it has been a "hatching nest" for external issues.
-Teacher has been pushed through union requirements instead of educational values.
*-Teacher awareness of standards in programs entry level, articulation, and certification.
-Youth leadership programs.
-Small schools.

-Upgrading - industry + change for all levels.
-T & I faces its greatest challenge with ending of sexual jobs discrimination.
-Informal in-house staff level.
-System to determine teachers actual needs.
-Supervision of non-degree teachers 1st year.
*-Evaluation - process and product.
-Local autonomy vs. state control.
-Curriculum design (articulation).
*-Role I.D. secondary and post-secondary.
-Research in competencies (where are we?).
-Reconsideration of educators values.
-I.D. of instructors field competencies.
-Student evaluation per objectives attained.
-Work habits.
-Status T & I statewide.
-Needs to service disadvantaged and handicapped.
-Violent opposition of labor to coop "the student should be in school".
*-Total coord. program I.A. and T & I.
-What do you do for prov. development in your state?
-Experience vs. proj. development.
-Don't confuse symptoms and problems. Symptoms are the result of poor administration.
-Have teachers been involved in the setting of priorities? Politicalization within the school system?
*-How in hell do you plan a week long in-service?
-P.R./communication problems with industry.
*-Nationwide consistency of policies and standards.
*-I.D. and clarify the objectives of T & I.
-Training by industry and private schools - coordination or competition?
-Development of an efficient placement and follow up system.
-Postpone T & I until post-secondary.
-Conference leading - conducting advisory committee meetings.

APPENDIX B: PARTICIPANT PRE-CONFERENCE MATERIAL

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Item 2: Invitation Letter A-42

Item 3: USOE Announcement A-44

Item 4: Tentative Conference Agenda A-46

Item 5: Memo to Conference Participants A-48

Item 6: Data Collection Instrument A-54

Appendix B
Item 1

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January 7, 1976

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

Dear

Congratulations! Your name has been nominated as one of four Trade and Industrial Education professionals to be invited, from your state, to attend the National Conference for Trade and Industrial Education Professional Development. The conference will be held in Dallas from January 13th to the 15th.

nominated you as a participant in this project. The other nominees for are as follows:

(insert)

If you decide to accept this responsibility, you will be part of a change agent team in your state. That team will lead other T & I professionals in planning and implementing those training changes which will have the most initial impact on pre-service and in-service professional development for your states T & I teachers and administrators. This responsibility will consist of a tri-partite activity plan as follows:

1. Pre-Conference data collection to involve approximately 24 T & I professionals. The change agent team will use a structured interview form for phone or personal interviews of key T & I professionals to pinpoint critical training issues in the state. We estimate that this data collection will take approximately 12 hours of your time.

   The project will provide the interview forms, data summarization, and $100 for phone costs.

2. National Conference activities will involve planning workshops, leadership implementation strategy workshops, and content sectionals on critical issues of common national interest. A tentative conference agenda is enclosed.

   Travel, food & lodging costs are not covered by the project. However, federal-vocational education funds from Title I, Part B, Section 122 of the Vocational Education Amendments of 1968 (PL90-576) and from Part F, Section 553 of the Education Professional Development Act (PL90-35) may be used for travel

& lodging expenses to attend the conference if state and local policies and plans make it possible to do so. Such determination is left entirely to the state or local agency.

3. Post Conference implementation objectives and activities will be planned during the last day of the conference. Although these activities will not be followed up as a part of the project, it is hoped that the change agent team, in conjunction with key T & I professionals consulted for data gathering, will actually engage in implementation of the professional development training changes that have been identified for their state.

, the national conference will have some productive planning and leadership workshops led by "top shelf" consultants, and sectionals that are most relevant to current T & I issues delivered by "name" T & I professionals. The main ingredient, however, is you. Your name was hand picked as a "prime mover" for your state. I hope that you will decide that you want to participate in this conference.

A response card is enclosed for your convenience. As soon as we receive your acceptance of the invitation, we will send you information to assist you in pre-conference data collection.

Sincerely yours,

Ray Hansen, Project Director
National Conference for T & I
Education Professional Development

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Enclosure

MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

TO Executive Officers, State Boards for Vocational Education and State Directors of Vocational Education

DATE: October 16, 1975

FROM William F. Pierce, Deputy Commissioner for Occupational and Adult Education

SUBJECT National Conference for Trade and Industrial Education Professional Personnel

A national invitational conference for approximately 250 Trade and Industrial Educators will be conducted by the School of Industry and Technology, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. This conference is a component of the grant issued to the Wisconsin State Board for Vocational Education by the U.S. Office of Education Regional Office in Chicago, Illinois. It is one of the seventeen national priority projects funded by the Vocational Education Personnel Development State Systems Program under the authority of the Education Professions Development Act (Public Law 90-35), Part F, Section 553. The Trade and Industrial Education Conference will be held at the Royal Coach Motor Hotel, 3800 West N.W. Highway, Dallas, Texas 75220, beginning at 8:00 a.m., Tuesday, January 13, 1976 and closing at 4:00 p.m., Thursday, January 15, 1976.

Each State Director of Vocational Education is invited to identify a four-member team within the State to receive invitations to the conference. Candidates may be identified from positions such as:

A Trade and Industrial instructor or teacher

A Trade and Industrial coordinator or supervisor

A Trade and Industrial State staff member

A Trade and Industrial teacher educator

A local Director of Vocational Education

Two alternative candidates should also be identified in the event that a candidate cannot accept the invitation. Names, addresses, and phone numbers of identified candidates should be forwarded to Mr. Ray Hansen, Project Director at the University of Wisconsin-Stout.

Goals of the conference are to:

(1) identify, prioritize, and address critical problem areas and needs in Trade and Industrial Education with a major emphasis upon implications for personnel development, and

(2) to develop a rudimentary communications network for Trade and Industrial Education personnel.

Pre-conference and post-conference activities will be implemented to assist in achieving these goals. A copy of the tentative program is enclosed (State Directors and Trade and Industrial Education State Supervisors only).

Federal vocational education funds from Title I, Part B, Section 122 of the Vocational Education Amendments of 1968 (Public Law 90-576) and from Part F, Section 553 of the Education Professional Development Act (Public Law 90-35) may be used for travel and lodging expenses to attend the conference if State and local policies and plans make it possible to do so. Such determination is left entirely to the State or local agency.

The Division of Vocational and Technical Education representative for the conference is William A. Dennis, Education Program Specialist with the State Programs and Services Branch. Daryl E. Nichols, V.T.E. Program Officer from the Chicago Regional Office is the Project Officer for the conference. Roland J. Krogstad, State Department of Education, Madison, Wisconsin is the State Coordinator.

For specific information contact:

Mr. Ray Hansen, Project Director
School of Industry and Technology
University of Wisconsin-Stout
Menomonie, Wisconsin 54751
Telephone: 715 232-1144

Information copies sent to:

Assistant Regional Commissioner, OAE
Regional V.T.E. Program Officers
State Supervisors of Trade and Industrial Education
Members, National Advisory Council on Vocational Education
Executive Officers and Chairman, State Advisory Councils for Vocational Education
E.P.D.A. State Personnel Development Coordinators for Vocational Education

Appendix B
Item 4

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

National Conference for Trade & Industrial Education Professional Development

January 13-15 - Royal Coach Motor Hotel - Dallas, Texas

This project is funded through a USOE grant under Part F, section 553 of EPDA

Theme: Personnel Development for T & I Teachers and Administrators

Four T & I professionals from each state, who are "prime movers" in professional development activities will be invited to the national conference.

Goals: This will be a working conference devoted to the following goals:

1. Address critical teaching and administrative professional development problem areas in T & I.

2. Development of communication linkages in states, regions, and nationally for implementation of changes.

Objectives: Specific objectives related to these goals are:

1. Participants will identify their state's critical training needs for both T & I teachers and administrators.

2. Participants will complete an anlysis of the resources needed in the state to deliver the needed training. This will include a power - influence analysis of the "legitimizers" who must be involved for implementation of training changes.

3. Each participant will make individual job activity commitments needed to implement professional development changes.

Activities: Subject to modification based upon participant input:

Pre-Conference
Oct. - Nov. Data collection by state participants on critical needs
Nov. - Dec. Phone or face to face conference for in-state change agent team

Conference
Jan. 13 DEVELOP STATE PROFESSIONAL DEVELOPMENT SYSTEMS DESIGN
"Identification & clarification of the objectives of T & I education" -
*Keynote address

*Workshop: State and regional meetings to develop consensus on critical issues
*"Key Results Area Planning" - consultant presentation
*Workshop: State teams meet to complete program priorities
evaluation - consultant help available

*Consultant presentation - "Systems Design in Education"
*Sectional alternative selection - see listing

Jan. 14 SECTIONAL ISSUES & CHANGE IMPLEMENTATION
*Consultant presentation - "Leading Groups: group dynamics techniques for use with advisory committees and educational management"
*Sectional alternative selections - see listing
*Consultant presentation - "Power & People: techniques to analyze the state and regional legitimizers as a basis for implementing professional development program changes"
*Workshop: State and regional power analysis
*Sectionals - see listing

Jan. 15 SECTIONAL ISSUES & IMPLEMENTATION PLANNING
*Sectionals - see listing
*Workshop: state and regional personnel development implementation strategies
*Consultant presentation - "Individual Performance Planning for Implementation"
*Workshop: Individual participants develop personal objectives and activities plan for implementation of 1 year KRA personal development milestones

Sectional Topics (Each will be available twice)

Teaching

Teaching psychological skills and work attitudes needed by effective T & I Teachers in the year 1979

Keeping T & I Instruction Current With Industry

Competency Based Teacher Education

Teacher Awareness of Standards

Articulation in Industrial Education

Administrative

Professional Development for Leadership in Student Organizations

Nationwide Consistency of Policies and Standards

Key to Success: Evaluation

Professional Development & Management Training for Administrative Personnel

Development & Implementation of a Coordinated Program of IA and T & I

Effective Planning of In Service Programs

Appendix B
Item 5

UNIVERSITY OF WISCONSIN

MEMO **STOUT**

MENOMONIE WISCONSIN 54751

TO: National T & I Conference Participants

FROM: National T & I Conference Staff

Welcome aboard! As a member of your state's change agent team, you will be engaging in pre-conference, conference, and post-conference activities to facilitate those T & I professional development activities most crucial to your state. Specific activities that you will engage in are outlined as follows:

PRE-CONFERENCE You can expect to spend about 12 hours of time on these activities. The project will reimburse your state team up to $110 for travel and phone costs incurred. That is $110 for the state, not for each participant.

Objectives:

1. To gather data concerning the critical issues that impact upon pre-service and in-service development for T & I administrators from 1976 - 1980.

2. To involve your state's key T & I professionals in the data gathering such that:

   a. data is as comprehensive as possible.
   b. the people needed to facilitate eventual changes are involved at the start.

3. To gather data concerning the existing pre-service and in-service activities that your state is providing for T & I administrators and teachers.

Activities:

1. Enclosed are 5 copies of a structured interview form plus descriptive material covering each topic on the interview form. You are to fill one form out yourself and interview four key T & I professionals, personally or by phone, and forward the completed forms to Stout for summarization.

2. Following summarization of the initial data that your team submits, you will receive a second interview form. You will re-contact your respondents from the first form to verify the data. Your verification interview forms will also be returned to Stout for compilation of your state's summary.

3. The 14 topics on the interview form were developed by the National T & I Conference Planning Committee as topics with current or pending national impact. Unless subsequent feedback on #1 and 2 on the preceding page negates some of these topics, each of them will be covered in sectional presentations at the National Conference. Please review the topic descriptions and nominate presenters/consultants that you would personally like to interact with at Dallas. Topic presenters will be selected based upon nominations submitted by all conference participants. A form is provided to facilitate your feedback on this.

4. It is possible that a number of issues beyond the 14 topics listed will emerge. These will be addressed in the form of "Discussion Forums" during the National Conference.

5. At the time that you receive Round #2 of the survey covering critical T & I professional development issues, you will receive a form to aid you in gathering data concerning your state's existent pre-service and in-service activities for T & I teachers and administrators.

Time Schedule

***1. Both survey rounds should be completed and into Stout by January 2.

***2. Presenter/consultant nominations must be submitted by December 15 for consideration.

CONFERENCE

Goals & Objectives

(Goal #1): To identify, prioritize, and address critical problem areas and needs in Trade and Industrial Education with major emphasis upon implications for personnel development.

Conference Objectives for Goal #1

At the completion of this conference, participants will have:

1. Completed a five-year systems design for Trade and Industrial Education personnel development in their state in which the key result milestones are consistent with state five-year objectives in Trade and Industrial Education. This system design will include three main sections:

a. an identification of critical problem areas and needs in Trade and Industrial Education personnel development.

b. an identification of the existing status of state Trade and Industrial Education personnel and personnel development.

c. a plan which specifies how the state will move from their existing system (see "b" above) of personnel development to a revised system which will result in personnel prepared to alleviate the critical problem areas and needs (identified in "a" above).

2. Completed specific two-year state milestone plans with priority decisions made covering the allocation of personnel and financial resources.

3. Divided short range state implementation responsibilities among state participants and translated those responsibilities into individual results, oriented implementation objectives and activity plans.

4. Cross correlated their state's Trade and Industrial Education personnel development goals with the goals of other states in their region, and identified areas for mutually beneficial personnel development activities.

5. Completed specific one-year regional plans with priority decisions made concerning allocation of resources.

6. Divided short range regional implementation responsibilities among regional participants, and translated those responsibilities into individual results based on implementation objectives and activity plans.

(Goal #2): Participants should be encouraged to develop at least a rudimentary communications network.

Conference Objectives for Goal #2

At the completion of this conference, participants will have:

1. Identified the key people in their state, and their region, who will be needed to successfully implement solutions to Trade and Industrial Education critical problem areas in the state and in the region.

2. Analyzed their own personal group interaction patterns in terms of + - task, + - human relationships, task leadership, guidance leadership, human relations leadership, and scapegoating.

3. Practiced the use of personal role pattern changes during the clarification, evaluation, and decision making phases of the planning activity.

4. Maintained and strengthened the existant (+) aspects of group communication climate; explored and resolved any conflicting interests which precipitate a (-) communications climate.

Activities & Time Schedule

Following are the conference activities coded as to the above listed objectives.

DEVELOP STATE PROFESSIONAL DEVELOPMENT SYSTEMS DESIGN

-January 13 (morning) 9:00 a.m.	Objective
"Identification & clarification of the objectives of T & I education" *Keynote address - Dr. Byrl Shoemaker	1.1
*Workshop: State and regional meetings to develop consensus on critical issues - this will be round #3 of the Delphi data generated by participants prior to the conference.	1.1a
*"Key Results Area Planning" - Mr. Zenon Smolarek - management consultant, UW - Stout	1.2
-January 13 (afternoon)	
*Workshop: State teams meet to complete program priorities evaluation - consultant help available for each state team	1.2
*"Systems Design in Education" - Dr. Harold Halfin and Dr. Orville Nelson, Center for VTAE, UW-Stout	1.1c
*Sectional alternative selection - see listing of 11 sections to select one for attendance	1.1a & c
-January 13 (evening - activities options1)	
*hospitality rooms?	
*regional dinner meetings	2.5
*discussion forums	1.1a
*state planning sessions	1.1, 2.4

CHANGE IMPLEMENTATION	Objective
-January 14 (morning)	
"Leading Groups: group dynamics techniques for use with advisory committees and educational management" - Mr. Ray Hansen, T & I Project Director & Management Consultant, UW -Stout	2.3
*Sectional alternative selections - see listing 11 sectionals to select 2 for attendance	1.1a & c
-January 14 (afternoon)	
"Power & People": techniques to analyze the state and regional legitimizers as a basis for implementing professional development program changes: - Dr. Jerry Coomer, management consultant, UW - Stout	2.1
*Workshop: State and regional power analysis - consultant help available for each state team	2.2
-January 14 (evening - activities optional)	
*National Association of State Supervisors Meeting	2.5
*discussion forums	1.1a
*state planning sessions	1.1, 2.4
*hospitality room	
IMPLEMENTATION PLANNING	
-January 15 (morning)	
*Sectionals - see listing of 11 sectionals to select 1 for attendance	1.1a & c
*Workshop: state and regional personnel development implementation strategies	1.4, 1.5, 2.4, 1.6
-January 15 (afternoon)	
"Individual Performance Planning for Implementation" - Dr. Jerry Coomer	
*Workshop: Individual participants develop personal objectives and activities plan for implementation of 1 year KRA personal development milestones. Individual consultant help available for each participant.	1.2, 1.6

*Conference summary: "Where Do We Go From Here?"
Ray Hansen

-The conference will end at 4:00 p.m. -

POST CONFERENCE

Each state's implementation activities will be planned on the last day of the conference. Although these activities will not be followed up as part of the project, it is hoped that the change agent team, in conjunction with key T & I professionals consulted for data gathering, will actually engage in the implementation of the professional development training changes that have been identified for their state.

A copy of the final report will be provided to each participant. This will include the text of the keynote address, texts of all consultant presentations, texts of all sectional presentations, and a summarized outline of each state's "Systems Design for T & I Professional Development". Discussion forum topics and individual performance objectives for professional development implementation will not be included.

If you have any questions, please contact:

Ray Hansen
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University of Wisconsin - Stout
Menomonie, Wisconsin 54751
Phone: 715/232-1144

Appendix B
Item 6

NATIONAL T & I CONFERENCE
PLANNING DATA FOR THE
STATE OF _____

Interviewer _____

Person Interviewed _____

Position of person interviewed (please check)

_____(1) Teacher

_____(2) Coordinator/Supervisor

_____(3) State staff

_____ (4) Teacher Educator

_____ (5) Director

_____ (6) Other _____

Directions: The questionnaire consists of a list of issues that the Planning Committee for the National T & I Conference generated. This list was distilled from 57 issues generated by T & I professionals representing all 10 USOE Regions.

1. Please complete a questionnaire yourself before interviewing others.

2. Fill this in yourself, for the people that you interview, after verbally questioning the person being interviewed. The interview can be done face to face or by telephone.

3. Select interviewees who meet both of the following criteria.

   a. Competency as a teacher or administrator in Trade and Industry Education.

   b. A "prime mover" in T & I education. That is, a person with legitimate power, or influence, over potential professional development training changes.

4. The question that you are to ask interviewees is as follows:

   "Following is a list of issues based upon the future trend of T & I education between now and 1980. To what extent should this issue have an impact on the preparation and upgrading of T & I teachers and administrators?"

   Explanatory material concerning each issue is enclosed to enable you to describe the issue more fully.

1.0 ADMINISTRATIVE: PROCESS AND CONTENT ISSUES		Not Important 1	Minor Concern 2	Routine Importance 3	Major Thrust 4	Very Critical 5	Comments & Sub-Issues
1.01	Professional Development for Leadership in Student Organizations	1	2	3	4	5	
1.02	Key to Success: Evaluation	1	2	3	4	5	
1.03	Professional Development and Management Training for Administrative Personnel	1	2	3	4	5	
1.04	Development and Implementation of a Coordinated Program of I.A. and T & I	1	2	3	4	5	
1.05	Effective Planning of In-Service Programs	1	2	3	4	5	
1.06	Identification and Clarification of the Objectives of T & I Education.	1	2	3	4	5	
1.07	A Systems Approach to Key Results Area Planning: the identification of program priorities and posteriorities.	1	2	3	4	5	
1.08	Leading Groups: group dynamics techniques for use with advisory committees and in educational decision making	1	2	3	4	5	
1.09	Power and People: techniques used by educational change agents to identify the legitimizers needed for implementing changes in educational systems.	1	2	3	4	5	
1.10	Other?	1	2	3	4	5	

2.0 TEACHING: METHODOLOGY AND CONTENT ISSUES	Not Important 1	Minor Concern 2	Routine Importance 3	Major Thrust 4	Very Critical 5	Comments and Sub-Issues
2.0 TEACHING: METHODOLOGY AND CONTENT						
2.01 Teaching psychological skills and work attitudes needed by effective T & I teachers in 1979.	1	2	3	4	5	
2.02 Keeping T & I instruction current with industry.	1	2	3	4	5	
2.03 Competency Based Teacher Education	1	2	3	4	5	
2.04 Teacher Awareness of Standards: National consistency in certification, curriculum, and job entry level standards.	1	2	3	4	5	
2.05 Articulation in Industrial Education.	1	2	3	4	5	
2.06 Other?	1	2	3	4	5	

A-56

APPENDIX C: CONFERENCE PROGRAM MATERIALS

Item 1: Conference Theme, Goals, Objectives, Planning Committee, Conference Staff A-58

Item 2: Conference Program A-60

Item 3: Sectional Topics on Critical T & I Issues A-64

Item 4: Conference Presenters A-65

Item 5: Workshop Room Assignments A-67

Item 6: Conference Staff Instructions

a. Sectional Hosting A-69

b. Process Consultant Assignments A-70

c. Change Agent Commitments A-72

Appendix C
Item 1

NATIONAL CONFERENCE FOR
TRADE AND INDUSTRIAL EDUCATION
PROFESSIONAL PERSONNEL

January 13-15, 1976

This project is funded through a USOE grant under Part F, section 553 of EPDA.

Theme: Personnel Development for T & I Teachers and Administrators

Goals: This will be a working conference devoted to the following goals:

1. Address critical teaching and administrative professional development problem areas in T & I.
2. Development of communication linkages in states, regions, and nationally for implementation of changes.

Objectives: Specific objectives related to these goals are:

1. Participants will identify their states critical training needs for both T & I teachers and administrators.
2. Participants will complete an analysis of the resources needed in the state to deliver the needed training. This will include a power - influence analysis of the "legitimizers" who must be involved for implementation of training changes.
3. Each participant will make individual job activity commitments needed to implement professional development changes.

NATIONAL PLANNING COMMITTEE

Region I	Donald E. Graves South Easton, Mass.	Region II	Donald R. Hoak Carle Place, New York
Region III	Edward P. Tangman Washington, D.C.	Region IV	Dr. Durwin Hanson Raleigh, N.C.
Region V	Arnie Potthast Madison, Wis.	Region VI	Robert Patterson Austin, Texas
Region VII	Dr. Harlan Giese Des Moines, Iowa	Region VIII	Odin Stutrud Wahpeton, N.D.
Region IX	Dr. James Herman Sacremento, Calif.	Region X	Robert Schroedel Bremerton, Wash.

A.V.A. T & I Division	Dr. John Walsh Minneapolis, Minnesota	Planning Meeting Host State	Ron Johnson Minneapolis, Mn.
Industry	Frank Primeau Mgr. Owner Services American Motors Detroit, Mich.	Labor	John Schmitt Pres., Wis. AFL-CIO Milwaukee, Wis.
USOE	Bill Dennis Educational Programs Specialist Washington, D.C.	USOE-Region V	Chuck Jaymes Manpower Development Specialist Chicago, Ill.

CONFERENCE STAFF

Ray Hansen
Project Director
U of W - Stout

Dr. Jerry Coomer
Management Consultant
U of W - Stout

Dr. Orville Nelson
Co-Director, CVTAE
U of W - Stout

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Charles Krueger
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Program Director
Industrial Arts Education
U of W - Stout

Dr. Merl Strong
Director
Center for Studies in Vocational Education
U of W - Madison

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Conference Program

Monday, January 12

6:00 p.m. - 9:00 p.m. Lower Lobby	ADVANCE REGISTRATION

Tuesday, January 13

DEVELOP STATE PROFESSIONAL DEVELOPMENT SYSTEMS DESIGN

8:00 a.m. - 9:00 p.m. Ballroom Foyer	REGISTRATION
9:00 a.m. - 9:15 a.m. Ballroom 1 & 2	WELCOME AND ANNOUNCEMENTS Ray Hansen
9:15 a.m. - 10:15 a.m. Ballroom 1 & 2	Introduction of Keynote Speaker Robert Patterson IDENTIFICATION AND CLARIFICATION OF THE OBJECTIVES OF T & I EDUCATION Dr. Byrl Shoemaker
10:15 a.m. - 10:30 a.m. Ballroom 1 & 2	Coffee Break
10:30 a.m. - 11:15 a.m. Ballroom 1 & 2	SYSTEMS DESIGN IN EDUCATIONAL PLANNING Dr. Orville Nelson
11:15 a.m. - 12:00 noon Ballroom 1 & 2	WORKSHOP: State Meeting to Develop Consensus on Critical Issues Impacting on Professional Development. This will be round #3 of the Delphi data generated by participants prior to the conference.
12:00 noon - 1:00 p.m. Copperwinkle Club	Lunch

1:00 p.m. - 2:00 p.m. Ballroom 1 & 2	KEY RESULTS AREA PLANNING Zenon Smolarek
2:00 p.m. - 3:00 p.m See meeting room assignments	WORKSHOP: State teams meet to complete program priorities evaluation. Consultant help available for each state team.
3:00 p.m. - 3:15 p.m.	Break
3:15 p.m. - 5:15 p.m. Ballroom 1 & 2	MAINTAINING T & I CREDIBILITY WITH INDUSTRY, LABOR, AND LEGISLATIVE BODIES Dr. Melvin Barlow, Lowell Burkett, Dr. Byrl Shoemaker, Dr. John Walsh, Dr. Chet Francke, Merlin Taylor Moderator: Dr. Phil Ruehl
5:30 p.m. - 7:00 p.m. Copperwinkle Club	Hospitality Room courtesy of Addressograph Multigraph Corporation Hosts: Chip Kishbaugh, Texas Educational Coordinator; Gary Martin, Educational Representative - Dallas; Ken Taylor, National Educational Marketing Specialist
8:00 p.m. - 9:30 p.m. King Arthur I	Region V, State T & I Supervisors Meeting - Constitution

Wednesday, January 14

CHANGE IMPLEMENTATION STRATEGY

8:00 a.m. - 10:00 a.m. Ballroom 1 & 2	LEADING GROUPS Ray Hansen
10:00 a.m. - 12:00 noon	SECTIONAL ISSUES See listing of issues to select one to attend. (Coffee available in sectional rooms)
12:00 noon - 1:00 p.m. Copperwinkle Club	Lunch

1:00 p.m. - 3:00 p.m. Ballroom 1 & 2 and Rooms 501-537	POWER AND PEOPLE Dr. Jerry Coomer
3:00 p.m. - 4:00 p.m. See meeting room assignments	WORKSHOP: State and regional power analysis. Consultant help available for each state team.
4:00 p.m. - 6:00 p.m.	SECTIONAL ISSUES See listing of issues to select one to attend.
8:00 p.m. - 10:00 p.m. Room 851	Meeting: National Association of State Supervisors of Trade and Industrial Education (NASSTIE)
8:00 p.m. - 9:00 p.m. Room 852	Discussion Forum: (optional) "Do You Teacher Modern Construction?" George K. McCord, Director, Career Education Portland Cement Association

Thursday, January 15

IMPLEMENTATION PLANNING

9:00 a.m. - 11:00 a.m.	SECTIONAL ISSUES See listing of issues to select one to attend. (Coffee available in sectional rooms)
11:00 a.m. - 12:00 noon See meeting room assignments	WORKSHOP: State and regional personnel development implementation strategies. Consultant help available for each state team.
12:00 noon - 1:00 p.m. Copperwinkle Club	Lunch
1:00 - 2:00 p.m. Ballroom 1 & 2	INDIVIDUAL PERFORMANCE PLANNING FOR IMPLEMENTATION Dr. Jerry Coomer

2:00 p.m. - 3:15 p.m. Ballroom 1 & 2	WORKSHOP: Individual participants develop personal objectives and activities plan for implementation of one year KRA personnel development milestones. Individual consultant help available for each participant.
3:15 p.m. - 4:00 p.m. Ballroom 1 & 2	WHERE DO WE GO FROM HERE? Ray Hansen

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SECTIONAL TOPICS ON CRITICAL T & I ISSUES

TOPIC	TIME & ROOM		
	Jan. 14 10:00-12:00	Jan. 14 4:00-6:00	Jan. 15 9:00-11:00
PRINCIPLES OF EFFECTIVE LEADERSHIP FOR VOCATIONAL YOUTH ORGANIZATIONS Presenters: Charlie Dygert & Larry Johnson Host: Dr. James Bensen		King Arthur I	King Arthur I
KEY TO SUCCESS: EVALUATION Presenter: Dr. Franklin King Host: Dr. Merle Strong	850		850
PROFESSIONAL DEVELOPMENT & MANAGEMENT TRAINING FOR TEACHING & ADMINISTRATIVE PERSONNEL Presenter: Dr. Charles Hopkins Host: Chuck Krueger		Sir Lancelot	Sir Lancelot
DEVELOPMENT & IMPLEMENTATION OF A COORDINATED PROGRAM OF I.A. & T & I Presenter: Lawrence Foth Host: Ned Weckmueller	851	851	
PSYCHOLOGICAL SKILLS & WORK ATTITUDES NEEDED BY EFFECTIVE T & I TEACHERS IN THE YEAR 1979 Presenter: Dr. George Mannen Host: Zenon Smolarek	King Arthur II	King Arthur II	
COMPETENCY BASED TEACHER EDUCATION Presenter: Dr. Robert Andreyka Host: Dr. Neal Prichard	852		852
TEACHER AWARENESS OF STANDARDS: NATIONWIDE CONSISTENCY OF POLICIES & STANDARDS Presenter: Robert Childers Host: Dr. Orville Nelson	857	857	
ARTICULATION IN INDUSTRIAL EDUCATION Presenter: Robert D. Sartin Host: Dr. Phil Ruehl	721		721

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Conference Presenters

Dr. Robert Andreyka
Program Leader
Vocational Education
Florida State University
Tallahassee, Florida

Dr. Melvin L. Barlow
Director
Division of Vocational Education
University of California
Los Angeles, California

Lowell A. Burkett
Executive Director
American Vocational Association
1510 H Street, N.W.
Washington, D.C.

Robert Childers
Southern Association of
Schools and Colleges
Atlanta, Georgia

Dr. Jerry Coomer
Department Chairman
Business & Industrial Management
University of Wisconsin-Stout
Menomonie, Wisconsin

Charles B. Dygert
Supervisor
Youth Activities - T & I
Department of Education
Columbus, Ohio

Lawrence Foth
Executive Director
Vocational Education
Advisory Council
State Department of Education
Topeka, Kansas

Dr. Chet Francke
Director
Education Systems Planning
General Motors Corporation
Detroit, Michigan

Ray Hansen
Program Director
M.S. Industrial Technology
University of Wisconsin-Stout
Menomonie, Wisconsin

Dr. Charles O. Hopkins
Planning Coordinator
State Department of Vocational
and Technical Education
Stillwater, Oklahoma

Dr. Franklin King
Coordinator of Industrial Education
Department of Practical Arts and
Vocational-Technical Education
University of Missouri
Columbia, Missouri

Larry W. Johnson
Executive Director
Vocational Industrial Clubs of
America
Falls Church, Virginia

Dr. George Mannen
Clinical and Consulting Psychologist
Carmichael, California

Dr. Orville Nelson
Co-Director, CVTAE
University of Wisconsin-Stout
Menomonie, Wisconsin

Rolland Pywell
Supervisor
Trade and Technical Education
State Department of Education
Boise, Idaho

Robert D. Sartin
Supervisor
Division of Vocational Education
University of California
Los Angeles, California

Dr. Byrl R. Shoemaker
State Director
Vocational Education
Columbus, Ohio

Zenon Smolarek
Management Consultant
University of Wisconsin-Stout
Menomonie, Wisconsin

Merlin Taylor
Training Director
International Union of
Bricklayers and Plasterers
Washington, D.C.

Dr. John Walsh
President-Treasurer
Dunwoody Industrial Institute
Minneapolis, Minnesota

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Item 5

WORKSHOP ROOM ASSIGNMENTS

USOE Region	State	Room	Staff Consultant
I			Dr. Neal Prichard
	Maine	King Arthur I	
	Massachusetts	King Arthur I	
	New Hampshire	King Arthur I	
II			Dr. Orville Nelson
	New York	King Arthur I	
	Virgin Islands	King Arthur I	
III			Dr. Orville Nelson
	Pennsylvania	King Arthur I	
	West Virginia	King Arthur II	
	District of Columbia	King Arthur II	
IV			Zenon Smolarek
	Alabama	King Arthur II	
	Florida	King Arthur II	
	Kentucky	King Arthur II	
	Mississippi	King Arthur II	
	South Carolina	King Arthur II	
	Tennessee	King Arthur II	
V			Dr. Phil Ruehl
	Illinois	Sir Lancelot	
	Indiana	Sir Lancelot	
	Michigan	Sir Lancelot	
	Minnesota	Sir Lancelot	
	Ohio	Sir Lancelot	
	Wisconsin	Sir Lancelot	
VI			Dr. Jerry Coomer
	Arkansas	721	
	New Mexico	721	
	Oklahoma	721	
	Texas	721	
VII			Dr. Merl Strong
	Iowa	850	
	Kansas	850	
	Missouri	850	
	Nebraska	850	

USOE Region	State	Room		Staff Consultant
		Jan. 13	Jan. 14-15	
VIII				Ned Weckmueller
	Colorado	Brighton Coach	851	
	Montana	Brighton Coach	851	
	North Dakota	Brighton Coach	851	
	Utah	Brighton Coach	851	
	Wyoming	Brighton Coach	851	
IX				Charles Krueger
	California	852		
	Nevada	852		
X				Charles Krueger
	Idaho	852		
	Oregon	852		
	Washington	852		

To: T & I Conference Staff

Topic: Sectional Hosting Assignments

From: Ray Hansen

Attached is a list of sectionals. You will note that your name is listed as "HOST" for one of those sectionals. Your responsibility will be as follows:

1. Find out when you presenter is arriving, where his room is, and get his conference packet to him. Be sure to call his attention to the Stout standards for reimbursement of expenses, and explain the expense form to him.

2. Find out where the room for the presentation is, and verify room set-up as requested by your presenter.

3. Check A.V. equipment to verify its' operation. Check availability of extra bulbs and location of fuses or circuit breakers.

4. Introduce your presenter - briefly!

5. Operate lights, A.V. equipment, distribute handouts as required.

6. Check his arrival & departure times against his reservation. Cancel room reservation for nights that he will not use.

I will make arrangements for the Keynote speaker, and will assist Phil as needed with his people.

The contact person on rooms and A.V. equipment at the Royal Coach is:

Ms. Metch Harrison

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To: T & I Conference Staff

Topic: Process Consultant Assignments

From: Ray Hansen

During the conference, participants will be engaging in five workshops. Your responsibility is summarized beside each of the workshop activities.

	Workshop	Staff Duty
January 13		
11:15 - 12:00	State Consensus on Critical Professional Development Issues	1. Memorize names of your people. 2. Explain the Gap planning concept, i.e. Goal, Existant Status, "Gap Issue"
2:00 - 3:00	Key Result Area Priorities Evaluation	1. Explain meaning of catagories, i.e. "today's breadwinner" 2. Explain numbered points on personnel allocation.
January 14		
3:00 - 4:00	State & Regional Power Analysis	1. Explain 5 sources of power, i.e. legitimate, expert, etc. 2. Explain analysis of issues, participants, and interactions.
January 15		
11:00 - 12:00	State & Regional Personnel Development Strategies	1. Help participants to tie three concepts together a. Gap planning b. Key Result Area Priority & Posteriority c. Power to set sequential change strategy.

2:00 - 3:15	Individual participants write personal objectives	1. Get objectives tied to KRA's only. 2. Get results listed. What will you have when you're done. 3. Get activities plan listed. 4. Get people identified.

Your assignment for Region(s) & States are as follows:

Neal Prichard - Region I, Main, Massachusetts, New Hampshire	13
Orville, Nelson - Region II & III, New York, Virgin Islands, Pennsylvania West Virginia, Washington D.C.	19
Zeke Smolarek - Region IV, Alabama, Florida, Kentucky, Mississippi, South Carolina, Tennessee	21
Phil Ruehl - Region V, Illinois, Indiana, Michigan, Wisconsin, Minnesota Ohio	24
Jerry Coomer - Region VI, Arkansas, New Mexico, Oklahoma, Texas	24
Merl Strong - Region VII, Iowa, Kansas, Missouri, Nebraska	16
Ned Weckmueller - Region VIII, Colorado, Montana, North Dakota, Utah, Wyoming	21
Chuck Krueger - Region IX & X, California, Nevada, Alaska, Idaho, Oregon Washington	22

You will note that I have not taken responsibility for any region. I will be handling administrivia, and will also float to help out as needed.

Appendix C
Item 6C

STAFF INSTRUCTIONS
FOR WORKSHOP JANUARY 15 2:00-5:15 P.M.

Guidelines to be used by Staff Consultants assisting state change agent team members to write their own performance plans in terms of key tasks.

prepared by Jerry Coomer

Objective: There are two basic reasons for having the team member write his/her own performance plans. These are:

1. Commitment to the job. When the team member is able to define the results expected, and also influence those goal targets, internal motivation is enhanced.

2. Understanding of job requirements. The team member is in the best position to specify job outputs requirements that are felt by him/her. Priorities felt may also best be explained by the person engaged in the job.

The function of the staff consultant in assisting the team member to define their job goals is aimed at facilitating the achievement of the above two objectives. A consultant is often in the best position to do this due to his non-involvement with the actual job of the team member. Thus the team member is automatically responsible for all input to the job performance plan. Whereas, if the team leader assists in the writing of the initial job description, the leaders biases may result in many of the key task areas being defined by the leader rather than the team member. The result of this is to lose commitment of the team member. However, if all input to the performance plan is by the team member, it then becomes the members job. Commitment to achievement of project objectives is much more probable.

Responsibilities of the consultant are as follows.

1. Terminology clarification
   Key Result Areas - provided by state change agent team in the form of an Output Objective with top priority.
   *Output Target - provided by state change agent team in the form of an output required from the project.
   *Goal - may be the same as Output Target, or may be one of several goals needed to achieve the complete objective.
   Key Task - a goal with priority due to:
      a. tied to a KRA
      b. takes significant time
      c. influences work of others (i.e. supervision) whereby output is amplified

*NOTE: Different authors reverse this terminology--some see "Goal" as broader than "Output Target" and others see it reversed. It really makes no difference.

A Key Task should be clarified in terms of Activity, Key Result Area, and Output Target. A Goal need not be spelled out to this detail.

ACTIVITY - Usually in the form of an INPUT statement (i.e., I write the district's annual report).
KRA - The reason that the activity is engaged in. What is the worst thing that would happen if we didn't do this activity?
OUTPUT TARGET - What is the objective, quantifiable measure of adequate performance of this activity. Must be a specific measurable output.

2. Act as a catalyst to allow team members to describe the project duties that they voluntarily assume for implementation. Open ended and reflective questioning should be used extensively. The team member should do 80% of the talking if you are effective in consulting.

3. Assist team member to develop measurable output statements for job OUTPUT TARGETS.

STATE _____ KEY RESULT AREA (Professional Development Issue)	OUTPUT TARGET	CHANGE AGENT TEAM MEMBER _____ ACTIVITY PLAN (step 1,2,3, etc.)

Professional Development Needs	Status of Existing Pre-Service & In-Service Development Activities	Key Result Area Priority

POSSIBLE WEAKNESSES OF T & I

Weakness	Past	Present	Future
1. A tendency in some places to make schools and classes solely a dumping ground for defectives and delinquents.			
2. A tendency in other places to make vocational training a minor part of the general course in education that prepares for more schooling and for college credits.			
3. A tendency in other places to make both the mistakes just described.			
4. An overweening desire by some local school authorities to have a Smith-Hughes school or department and have the use of federal and state moneys, which often leads them to establish vocational courses which are not feasible, do not meet required standards, or cannot be successfully maintained.			
5. The transfer and use in vocational instruction of the traditional organization, procedures, content, and methods of regular education.			
6. A tendency to focus local effort in some communities entirely upon the training of males to the neglect of females; and in others, upon females to the neglect of males.			
7. A tendency to confine vocational work to small groups of adolescents who have not yet gone to work and to a limited number of trades and employments; and almost completely to neglect all youth and adults already employed as wage earners.			
8. The utter isolation of some school officials and their vocational ventures from the occupations and trades of the community, particularly from those for which they are attempting to train young people.			
9. Failure of some states and some local communities to provide adequate funds for the effective promotion, establishment, equipment, maintenance, supervision, and expansion of the work.			
10. The need of more, well-prepared, and experienced leaders in some states and communities, who have the vision, knowledge, resourcefulness, and courage which the task requires.			

Weakness	Past	Present	Future
11. The need of more teachers having adequate trade experience, technical knowledge, and teaching ability.			
12. As the most serious and far-reaching weakness, due to the inefficiency of some teacher-training institutions, some state and local leaders are being prepared through instruction given them almost entirely by teacher trainers who have had no experience whatever in either the teaching or the supervision of vocational schools or subjects and some of whom do not, in reality, "know what it is all about."			
13. This is no less true of the efforts of such institutions to prepare instructors of practical and related vocational subjects.			